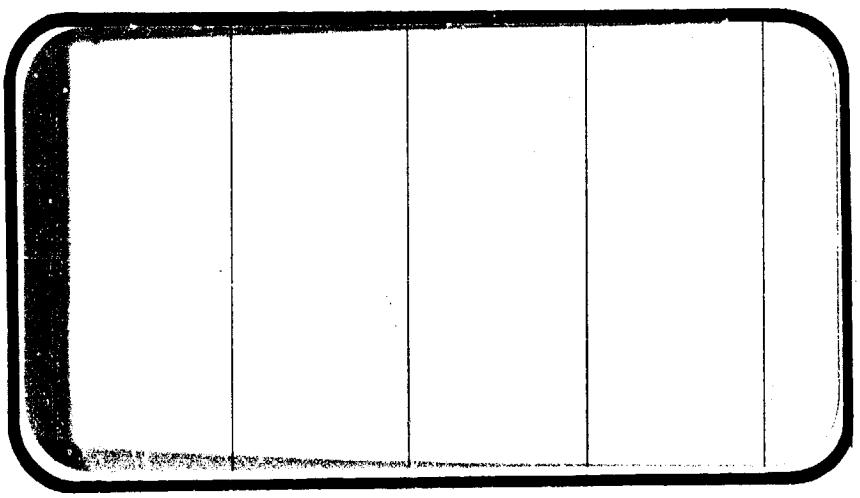
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

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EFFECTS OF THE SIX ENGINE AIR BREATHING PROPULSION SYSTEM ON SPACE SHUTTLE ORBITER SUBSONIC STABILITY AND CONTROL CHARACTERISTICS (0A71C)

By

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Prepared under NASA Contract Number NAS9-13247

by

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New Orleans, La. 70189

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Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	NAAL 712
NASA Series No.:	OA71C
Model No.:	43-0
Test Date:	4 Sept. - 14 Sept., 1973

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EFFECTS OF THE SIX ENGINE AIR BREATHING PROPULSION SYSTEM ON SPACE SHUTTLE ORBITER SUBSONIC STABILITY AND CONTROL CHARACTERISTICS (OA71C)

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ABSTRACT

Experimental aerodynamic investigations were conducted on an 0.0405 scale representation of the -89B Space Shuttle Orbiter in the Rockwell International 7.75 x 11.00 Foot Low Speed Wind Tunnel during the time period September 4 - 14, 1973. The NASA designation for this test was OA71C.

The primary test objective was to optimize the air breathing propulsion system nacelle cowl-inlet design and to determine the aerodynamic effects of this design on the orbiter stability and control characteristics. Nacelle cowl-inlet optimization was determined from total pressure - static pressure measurements obtained from pressure rakes located in the left hand nacelle pod at the engine face station (see figure 3).

After the optimum cowl-inlet design, consisting of a 7° cowl lip angle, short cowl, 7° short diverter, and a nacelle toe-in angle of 5° was selected, the aerodynamic effects of various locations of this design were investigated. The 3 pod - 6 nacelle configuration was tested both underwing and overwing in three different longitudinal locations. Orbiter control effectiveness, both with and without nacelles, was investigated at elevon deflections of 0°, -10°, and +15° and at aileron deflections of 0° and +10° about 0° elevon.

The orbiter model was sting mounted on a 2.5 inch diameter internal strain gage balance entering through the base region. The nominal angle of attack range was $-4° \leq \alpha \leq 30°$. Yaw polars were investigated over the beta range of $-10° \leq \beta \leq 10°$ at fixed angles of attack of 0° and 10°.

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TABLE OF CONTENTS

	PAGE
ABSTRACT	iii
INDEX OF MODEL FIGURES	2
INDEX OF DATA FIGURES	3
NOMENCLATURE	8
CONFIGURATIONS INVESTIGATED	12
DATA REDUCTION	13
TEST FACILITY DESCRIPTION	15
TABLES	
I. TEST CONDITIONS	16
II. DATASET COLLATIONS	17
III. MODEL COMPONENT DIMENSIONAL DATA	22
FIGURES	
MODEL	47
DATA	55
APPENDIX - TABULATED SOURCE DATA	

INDEX OF MODEL FIGURES

FIGURE	DESCRIPTION	PAGE
1.	Axis Systems.	47
2.	Model and Component Details.	
	a. General Arrangement -89B Orbiter.	48
	b. Sign Convention for Control Surfaces.	49
	c. Nacelle Pressure General Arrangement.	50
3.	Model Installation Photographs.	
	a. Front View, Underwing ABPS Configuration.	51
	b. Bottom View, Underwing ABPS Configuration.	51
	c. Front View, Overwing ABPS Configuration.	52
	d. Rear View, Overwing ABPS Configuration.	52
	e. Bottom View, Overwing ABPS Configuration.	53
	f. Front View, Nacelle J_{32} Configuration and Internal Pressure Rake Installation.	53
	g. Front View, Nacelle J_{26} Configuration With Long Flow Diverter.	54
	h. Front View, Nacelle J_{25} Configuration With Short Flow Diverter.	54

INDEX OF DATA FIGURES

FIGURE NUMBER	TITLE	SCHEDULE OF COEFFICIENTS PLOTTED	CONDITIONS VARYING	PAGES
Fig. 4	Elevon Effectiveness - No Nacelles	(A)	ELEVON	1-10
Fig. 5	Incremental Effect of Elevons - No Nacelles	(B)	DELVON ALPHA	11-39
Fig. 6	Elevon Effectiveness - Clustered Nacelles-Underwing XO = 950	(A)	ELEVON	40-49
Fig. 7	Incremental Effect of Elevons - Clustered Nacelles-Underwing XO = 950	(B)	DELVON ALPHA	50-78
Fig. 8	Elevon Effectiveness - Clustered Nacelles-Underwing XO = 1005	(A)	ELEVON	79-88
Fig. 9	Incremental Effect of Elevons - Clustered Nacelles-Underwing XO =1005	(B)	DELVON ALPHA	89-117
Fig. 10	Elevon Effectiveness - Clustered Nacelles-Underwing XO = 1060	(A)	ELEVON	118-127
Fig. 11	Incremental Effect of Elevons - Clustered Nacelles-Underwing XO = 1060	(B)	DELVON ALPHA	128-156
Fig. 12	Elevon Effectiveness - Clustered Nacelles - 2 Overwing XO = 1060	(A)	ELEVON	157-166
Fig. 13	Incremental Effect of Elevons - Clustered Nacelles-2 Overwing XO = 1060	(B)	DELVON ALPHA	167-195
Fig. 14	Elevon Effectiveness - Clustered Nacelles - 2 Overwing XO = 950	(A)	ELEVON	196-205

INDEX OF DATA FIGURES (CONTINUED)

FIGURE NUMBER	TITLE	SCHEDULE OF COEFFICIENTS PLOTTED	CONDITIONS VARYING	PAGES
Fig. 15	Incremental Effect of Elevons - Clustered Nacelles - 2 Overwing XO = 950	(B)	DELVON ALPHA	206-234
Fig. 16	Ailerons Deflected - No Nacelles	(C)	AILRON	235-237
Fig. 17	Aileron Effectiveness Derivatives - No Nacelles	(D)	DALRON	238-240
Fig. 18	Ailerons Deflected - Clustered Nacelles Underwing XO = 950	(C)	AILRON	241-243
Fig. 19	Aileron Effectiveness Derivatives - Clustered Nacelles Underwing XO=950	(D)		244-246
Fig. 20	Ailerons Deflected - Clustered Nacelles Underwing XO = 1005	(C)	AILRON	247-249
Fig. 21	Aileron Effectiveness Derivatives - Clustered Nacelles Underwing XO = 1005	(D)		250-252
Fig. 22	Ailerons Deflected - Clustered Nacelles Underwing XO = 1060	(C)	AILRON	253-255
Fig. 23	Aileron Effectiveness Derivatives - Clustered Nacelles Underwing XO = 1060	(D)		256-258
Fig. 24	Ailerons Deflected - Clustered Nacelles 2 Overwing XO = 1060	(C)	AILRON	259-261

INDEX OF DATA FIGURES (CONTINUED)

FIGURE NUMBER	TITLE	SCHEDULE OF COEFFICIENTS PLOTTED	CONDITIONS VARYING	PAGES
Fig. 25	Aileron Effectiveness Derivatives - Clustered Nacelles 2 Overwing XO = 1060	(D)		252-264
Fig. 26	Ailerons Deflected - Clustered Nacelles 2 Overwing XO = 950	(C)	AILRON	265-267
Fig. 27	Aileron Effectiveness Derivatives - Clustered Nacelles 2 Overwing XO = 950	(D)		268-270
Fig. 28	Lateral/Directional Characteristics - No Nacelles	(E)	ALPHA	271-273
Fig. 29	Lateral/Directional Derivatives - No Nacelles	(F)		274-276
Fig. 30	Lateral/Directional Characteristics - Clustered Nacelles Underwing XO = 950	(E)	ALPHA	277-279
Fig. 31	Lateral/Directional Derivatives - Clustered Nacelles Underwing XO = 950	(F)		280-282
Fig. 32	Lateral/Directional Characteristics - Clustered Nacelles Underwing XO = 1005	(E)	ALPHA	283-285
Fig. 33	Lateral/Directional Derivatives - Clustered Nacelles Underwing XO = 1005	(F)		286-288

INDEX OF DATA FIGURES (CONTINUED)

FIGURE NUMBER	TITLE	SCHEDULE OF COEFFICIENTS PLOTTED	CONDITIONS VARYING	PAGES
Fig. 34	Lateral/Directional Characteristics - Clustered Nacelles Underwing XO = 1060	(E)	ALPHA	289-291
Fig. 35	Lateral/Directional Derivatives - Clustered Nacelles Underwing XO = 1060	(F)		292-294
Fig. 36	Lateral/Directional Characteristics - Clustered Nacelles 2 Overwing XO = 1060	(E)	ALPHA	295-297
Fig. 37	Lateral/Directional Derivatives - Clustered Nacelles 2 Overwing XO = 1060	(F)		298-300
Fig. 38	Lateral/Directional Characteristics - Clustered Nacelles 2 Overwing XO = 950	(E)	ALPHA	301-303
Fig. 39	Lateral/Directional Derivatives - Clustered Nacelles 2 Overwing XO = 950	(F)		304-306
Fig. 40	Longitudinal Characteristics - Effects of Individual Clusters	(A)	NACELLE NACX/L	307-316
Fig. 41	Longitudinal Characteristics - Effects of Shell of Clusters	(A)	NACELLE NACX/L NACLIP	317-326

INDEX OF DATA FIGURES (CONCLUDED)

FIGURE NUMBER	TITLE	SCHEDULE OF COEFFICIENTS PLOTTED	CONDITIONS VARYING	PAGES
Fig. 42	Longitudinal Characteristics - Effects of Underwing Clusters	(A)	NACELLE NACX/L	327-336
Fig. 43	Longitudinal Characteristics - Effects of Overwing Clusters	(A)	NACELLE NACX/L	337-346

SCHEDULE OF COEFFICIENTS PLOTTED:

(A) CL, CN, CD, CDF, CA, CAF, CAB, CLMFWD, CLMAFT, XCP/L, L/DF versus ALPHA
CL, CN versus CLMFWD
CL versus CD

(B) DCL, DCN, DCD, DCDF, DCA, DCAF, DCAB, DCMFWD, DCMAFT versus ALPHA
DCL, DCD, DCN, DCA, DCMFWD, DCMAFT versus DELVON

(C) CYN, CBL, CY versus ALPHA

(D) DCYNDA, DCBLDA, DCY/DA versus ALPHA

(E) CYN, CBL, CY versus BETA

(F) CYBETA, CYNBET, CBLBET versus ALPHA

NOMENCLATURE
General

SYMBOL	SADSAC SYMBOL	DEFINITION
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_l - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m^2, psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m^2, psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m^3, $slugs/ft^3$
		Reference & C.G. Definitions
A_b		base area; m^2, ft^2
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
ℓ_{REF} $\bar{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2, ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS	
b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)

Body-Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
		Stability-Axis System
C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (CONTINUED)

ADDITIONS TO STANDARD LIST

SYMBOL	SADSAC SYMBOL	DEFINITION
$C_{Y_{\delta_a}}$	DCY/DA	side force derivative with aileron deflection, per degree
$C_{\ell_{\delta_a}}$	DCBLDA	rolling moment derivative with aileron deflection, per degree
$C_{n_{\delta_a}}$	DCYNDA	yawing moment derivative with aileron deflection, per degree
C_{Y_β}	DCY/DB	side force derivative with sideslip angle, per degree
C_{ℓ_β}	DCBLDB	rolling moment derivative with sideslip angle, per degree
C_{n_β}	DCYNDB	yawing moment derivative with sideslip angle, per degree
$C_{m_{aft}}$	CLMAFT	pitching moment coefficient about aft C.G. limit
$C_{m_{fwd}}$	CLMFWD	pitching moment coefficient about forward C.G. limit
XCP/ℓ	XCP/L	longitudinal center of pressure location, fraction of body length
ΔC_A	DCA	incremental axial force coefficient
ΔC_{A_b}	DCAB	incremental base axial force coefficient
ΔC_{A_f}	DCAF	incremental forebody axial force coefficient
ΔC_D	DCD	incremental drag coefficient
ΔC_{D_f}	DCDF	incremental forebody drag coefficient
ΔC_L	DCL	incremental lift coefficient

NOMENCLATURE (CONCLUDED)

SYMBOL	SADSAC SYMBOL	DEFINITION
$\Delta C_{m_{aft}}$	DCMAFT	incremental pitching moment coefficient about aft C.G. limit
$\Delta C_{m_{fwd}}$	DCMFWD	incremental pitching moment coefficient about fwd C.G. limit
ΔC_N	DCN	incremental normal force coefficient
δ_a	AILRON	aileron, total aileron deflection angle, (left aileron - right aileron)/2; degrees
δ_e	ELEVON	elevon, surface deflection angle, positive deflection, trailing edge down; degrees
δ_f	BDFLAP	flap, surface deflection angle, positive deflection, trailing edge down; degrees
NACX/L	NACX/L	nacelle longitudinal location (% L_B)
LIP	NACLIP	nacelle cowl lip angle; degrees
NAC_β	NACBTA	nacelle toe-in angle; degrees

CONFIGURATIONS INVESTIGATED

The model used for this test period was an 0.0405 scale representation of the Rockwell International -89B Space Shuttle Orbiter. The basic model is of the blended wing-body design utilizing a double delta wing (75°/45° $\Lambda_{L.E.}$), full span elevons (with unswept hingeline), a centerline vertical tail with rudder and/or rudder flare capability, a canopy, and a manipulator arm housing. To complete this orbiter ferry configuration air breathing engine nacelles were located in various groupings and locations on the wing and fuselage as per dwg. SS-A00138. All model components were per the -89B configuration except for the fuselage lines from station 1307 aft (which are ATP configuration), the various engine nacelle groupings and locations, and the centerline vertical tail.

The orbiter model was constructed either of wood and/or aluminum and was mounted on the Task Corporation 2.5 inch MK IX internal strain gage balance. The left hand engine pod was instrumented with an 8 tube static pressure and 17 tube total pressure rake in each nacelle. This pressure monitoring rake was located at the engine face station and was used to determine engine pressure recovery efficiency. The pressure rake orientation is per figure 2C.

For this test period the following nomenclature was used to designate the various model components:

Component	Description
B_{16}	-89B fuselage
C_5	-89B canopy
D_7	-89B manipulator arm housing
E_{18}	Full span elevon used on wing W_{87}
F_1	Body flap used on fuselage B_{16}
J_{25} thru 39	Air breathing propulsion systems consisting of various nacelle groupings and locations. See model dimensional data.
R_3	Rudder used on vertical tail V_3
V_3	ATP centerline vertical tail

CONFIGURATIONS INVESTIGATED (CONCLUDED)

Component	Description
W_{87}	-89B double delta wing (75°/45° L.E.)
X_9	Transition grit located on model nose and all swept surfaces.
X_{10}	Transition grit located on model nose, all swept surfaces, and ABPS nacelles.

DATA REDUCTION

The aerodynamic force and moment data were measured by the Task Corporation 2.5 inch MK IX strain gage balance. The data have been corrected for model base and balance chamber pressure effects, nacelle internal drag, model blockage influence on tunnel dynamic pressure, wall interference effects, sting and balance deflections, and model weight tare.

The corrections made to axial force were accomplished in the following manner:

$$C_{A_f} = C_A - C_{A_{BC}} - C_{A_b} - C_{A_N} - C_{A_T}$$

where:

$$C_{A_{BC}} = -\left(\frac{P_{BC} - P_o}{q}\right)\left(\frac{A_{BC}}{S_w}\right)$$

and $$C_{A_b} = -\left(\frac{P_b - P_o}{q}\right)\left(\frac{A_b}{S_w}\right), \quad P_b = 1/5(P_{b_1} + \ldots + P_{b_5})$$

and

C_{A_N} = Nacelle internal drag correction

C_{A_T} = Model axial force weight tare

DATA REDUCTION (CONCLUDED)

The pressure data obtained from the nacelle engine face rakes were reduced to $\left(\frac{P_{s1\rightarrow8} - P_o}{q}\right)$ for all static pressures and to $P_{T1\rightarrow17}/P_T$ for all total pressures.

The following reference dimensions were used for reducing all aerodynamic data to coefficient form:

Symbol	Definition	Value
A_b	Area of base, ft^2	0.51939
A_{BC}	Area of balance cavity, ft^2	0.13635
S_W	Area of wing, ft^2	4.4123
XMRP	Center of gravity, fus. sta. (fwd)(66% L_B)	43.5974
	Center of gravity, fus. sta. (aft)(68% L_B)	44.6731
ZMRP	Center of gravity, waterplane	16.2000
L_B	Length orbiter body, in.	53.7840
$\bar{c}_w$(LREF)	Wing MAC, in.	19.2300
$\bar{b}_w$(BREF)	Wing span, in.	37.9350
C_{A_N}	Axial force correction for $J_{25\rightarrow35,\ 37,\ 38}$	0.00247
	Axial force correction for J_{36}	0.00165
	Axial force correction for J_{39}	0.00082
C_{A_m}	Pitching moment about fwd C.G.correction for $J_{25\rightarrow34,\ 37}$	0.00081
	Pitching moment about fwd C.G. correction for $J_{35,\ 38}$	0.00035
	Pitching moment about fwd C.G. correction for J_{36}	0.00054
	Pitching moment about fwd C.G. correction for J_{39}	0.00027

TEST FACILITY DESCRIPTION

The North American Aerodynamics Laboratory (NAAL) 7.75 x 11-Foot Wind Tunnel is a continuous flow, closed circuit, single return type tunnel capable of speeds up to 200 miles per hour. The test section is vented to atmospheric pressure and is 7.75 x 11 feet wide by 12 feet in length. Power is supplied by a 1250 horsepower nacelle mounted synchronous motor driving a 19 foot, seven blade, laminated birch propeller. The airspeed is controlled by varying the degree of coupling between the motor and propeller by means of a magnetic clutch. A damping screen and honeycomb section in the settling chamber upstream from the contraction cone (ratio 7.53 to 1) minimizes turbulence in the test section. The NAAL Wind Tunnel has been in operation since June 1943 and calibrations are available over a wide range of test conditions.

Tests may be conducted using a variety of mounting systems, e.g.; a single strut, double strut, sting strut, reflection plane, cable suspension, and two dimensional wall. Aerodynamic data may be measured by a planar type external balance system or sting mounted internal balances. An Astrodata Automatic Data Acquisition System is used to collect, multiplex, digitize, and record 50 channels of force and/or pressure data on magnetic tape. This data is then rapidly reduced and plotted using automatic data processing equipment and an automatic digital plotter.

TABLE I.

TEST : DATC - NAAL 712 DATE : 4/25/73

TEST CONDITIONS

NOMINAL MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. ft.)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.21	1.44 x 10⁶/FT	60 lbs/FT²	120 → 120°F

BALANCE UTILIZED: TASK 2.5 INCH MK IX

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	500 lbs	± .25%	
SF	750 lbs	"	
AF	200 lbs	"	
PM			
RM			
YM	4000 in-lbs	± .25%	

COMMENTS:

TABLE II

FORCE DATA RUNS

TEST: OA71C - NAAL 712 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: 9/25/73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δF	δa	δe	NALX/L	LIP	IMC β	NO. OF RUNS	MACH NUMBERS .21	TEST RUN NUMBERS
RDU 001	B1C5D7F1W87E13V3K3X9	A	0	-18	0	0					1	
002		0	F								2	
003		10									3	
004		A	0			5					4	
005					5	0					5	
006					0	-10					6	
007					10	0					7	
008					0	10					8	
009						-20					9	
010					-15	0					10	
011		0	F		0						11	
012		A	0			-40					12	
014						-30					14	
032	B1C5D7J32F1W87E13V3K3X10					0	0	7°	5°		32	
033		C	F								33	
034		10									34	
035		A	0								35	
036	B1C5D7J32F1W87E13V3K3X10										36	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES: X(A) = -4, -2, -1, 0, 1, 2 → 30, Δα = 2° (COEFFICIENTS)

δ(F) = -10, -5, 0, 5, 10 (LEARN 1) (LEARN 2) ETC.

17

TABLE II (Continued)

F. P. DATA RUNS

TEST: CATIC - NAAL 712 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: 9/28/73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δF	δ2	δe	NACx/c	LIP	NACβ	NO. OF RUNS	MACH NUMBERS
RDL1037	Bu'sDnT54F1w37E1e1V3R2X10	A		-18	0	0	0	7°	5°		.21
038		0	F								38
039		10									39
040		A	0			15					40
041						-10					41
042					10	0					42
043							.27				43
044					0	-10					44
045						15					45
046						0					46
047		0	F								47
048		10									48
049		A	0				.53				49
050		0	F								50
051		10									51
053		A	0			-10					53
054					10	0					54
055					0	15					55

TEST RUN NUMBERS

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES: α(A) = -4, -2, -1, 0, 1, 2 → 30, Δα = 2° | β(F) = -10, -5, 0, 5, 10

TABLE II (Continued)

Flight Data Runs

TEST : DATIC - NAAL 712 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE : 9/28/73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δF	δa	δe	NAC X/L	LIP	NAC β	NO. OF RUNS	MACH NUMBERS .21	TEST RUN NUMBERS
RDU 058	BuCsDaT35F1We7E1eV3R3X10	A	0	-13	0	0	.53	7°	5°		58	
059		0	F								59	
060		10	↓			↓					60	
061		A	0			15					61	
062					↓	-10					62	
063					10	0	↓				63	
064					↓	↓	0				64	
065					0	-10					65	
066						15					66	
067		↓	↓			0					67	
068		0	F								68	
069	↓	10	↓				↓	↓	↓		69	
070	BuCsDaF1We7E1eV3R3X9	A	0			↓	—	—	—		70	
071	↓					15	—	—	—		71	
072	BuCsDaT36F1We7E1eV3R3X10					0	0	7°	5°		72	
073	BuCsDaT34F1We7E1eV3R3X10						↓	↓	↓		73	
074	BuCsDaT37F1We7E1eV3R3X10							0			74	
075	BuCsDaT30F1We7E1eV3R3X10	↓	↓	↓	↓	↓	.53	↓	↓		75	

1 7 13 19 25 31 37 43 49 55 61 67 73 76

α OR β SCHEDULES

α(A) = -4, -3, -1, 0, 1, ... 10, 20, Z

δF) = -10, -5, 0, 5, ...

TABLE II (Continued)

FORCE DATA RUNS

TEST: DATIC - NAAL 712 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: 9/28/73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δF	PARAMETERS/VALUES δa	PARAMETERS/VALUES δe	PARAMETERS/VALUES NAC X/L	PARAMETERS/VALUES LIP	PARAMETERS/VALUES NAC β	NO. OF RUNS	MACH NUMBERS .21	TEST RUN NUMBERS
RDL076	BWSDN139FHW7EW3V3R3X10	A	0	-18	0	0	.27	7°	5°		76	
077	BWSDN139FHW7EW3V3R3X10	↓	↓	↓	↓	↓					77	

1 7 13 19 25 31 37 43 49 55 61 67 73 78

α OR β SCHEDULES: α(A) = -4, -2, -1, 0, 1, 2 → 30, CONSECUTIVE Δα = 2 (IF APPLICABLE)

β(F) = -10, -5, 0, 5, 10

02

TABLE II (Concluded)

INLET OPTIMIZATION RUNS (PRESSURE DATA)

TEST: UATIC - NAAL 712 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: 9/28/73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δF	δa	δe	MACH	LIP	NAC,β	NO. OF RUNS	MACH NUMBERS	TEST RUN NUMBERS
RDU 015	$B_{10}C_6D_7J_{25}F_{11}W_{87}E_{15}V_3R_3X_{10}$	A	0	-18	0	0	0	0	0		.21	
016	J_{26}										15	
018	J_{27}										16	
019	J_{28}							↓			10	
020	J_{27}							7°			19	
021	J_{28}										20	
022	J_{25}										21	
023	J_{26}										22	
024	J_{29}								↓		23	
025	↓								5°		24	
026	J_{30}								↓		25	
027	↓								0		26	
028	J_{31}								↓		27	
029	↓								↓		28	
030	↓								5°		29	
											30	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES: α(A) = -4, -2, -1, 0, 1, 2, 4 → 30, Δα = 2° COEFFICIENT

β(E) = -10, -5, 0, 5, 10

PRESSURE DATA NOT AVAILABLE TO DATA MANAGEMENT SYSTEMS.

TABLE III.

MODEL COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: BODY - B16

GENERAL DESCRIPTION: -89B Fuselage

Scale Model = 0.0405

DRAWING NUMBER: VL72-000089

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length ~ in.	1328.30	53.796
Max. Width		
Max. Depth ~in.	248.00	10.044
Fineness Ratio		
Area ~ft^2		
Max. Cross-Sectional	355.28	0.583
Planform		
Wetted		
Base		

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

TABLE III (Continued)

MODEL COMPONENT: Canopy C5

GENERAL DESCRIPTION: -89B Canopy

Scale Model = 0.0405

DRAWING NUMBER: VL70-000092

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length		
Max. Width		
Max. Depth		
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		
Sta. Fwd. Bulkhead, fus. sta.	391.00	15.836
Sta. T.E. , fus. sta.	560.00	22.680

TABLE III (Continued)

MODEL COMPONENT: BODY - Manipulator Housing D-7

GENERAL DESCRIPTION: B9B Configuration, Light WT. Orbiter Per Lines VL70-000093

Scale Model: .0405

DRAWING NUMBER: VL70-000093

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length, in.	881.00	35.681
Max. Width in.	51.00	2.066
Max. Depth in.	20.00	0.810
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

C_L Fuselage, BP = 0.0
WP = 500.0 in FS
X_o = 426.0 to 1307.0

TABLE III (Continued)

MODEL COMPONENT: Elevon E18

GENERAL DESCRIPTION: Unswept Hingeline Elevon used on Wing W87

Scale Model - 0.0405

DRAWING NUMBER: VL70-000093

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - ft^2	205.52	0.337
Span (equivalent)	353.34	14.310
Inb'd equivalent chord	114.78	4.649
Outb'd equivalent chord	55.00	2.228
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.208	0.208
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	0.000	0.000
Tailing Edge	-10.020	-10.020
Hingeline	0.000	0.000
Area Moment (Normal to hinge line) ft^3	1548.07	2.539

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR.

TABLE III (Continued)

MODEL COMPONENT: Body Flap - F1

GENERAL DESCRIPTION: Body Flap Located on Lower Aft Portion of Fuselage Trailing Edge

Scale Model = .0405

DRAWING NUMBER: VL70-000003A

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length in.	236.54	9.580
Flap L.E. Fus. Sta. in.	1528.30	61.896
Flap T.E. Fus. Sta. in.	1650.56	66.848
Span in.	236.54	9.580
Area ft^2		
Max. Cross-Sectional		
Planform	199.75	0.328
Wetted		
Base		

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : AIR BREATHING PROPULSION SYSTEM - J_{85}

GENERAL DESCRIPTION : Six underwing engines installed in three nacelle pods. Inlet has short cowl, 0° or 7° cowl, lip angle, short flow diverter, 0° diverter lip angle

MODEL SCALE: 0.0405

DRAWING NUMBER : SS-A00139

DIMENSIONS : (EACH NACELLE)	FULL SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max Width - In.	66.00	2.673
Max Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118
Wetted		
Base		

	Wing Pods		C Pod	
Nacelle Sta. 0.0 @	Outb'd	Inb'd	Left	Right
Model Sta. - In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	+ 8.910	- 1.342	+ 1.342
Incidence - deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM, J_{26}

GENERAL DESCRIPTION: Six underwing engines installed in three nacelle pods. Nacelle inlet configuration has short cowl, 0° or 7° cowl lip angle, long flow diverter, 0° diverter lip angle.

MODEL SCALE = 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS: (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - IN.	209.51	8.485
Max. Width - IN.	66.00	2.673
Max. Depth - IN.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118
Wetted		
Base		

Nacelle Sta. 0.0 @	Wing Pods		Q. Pod	
	Outb'd	Inb'd	Left	Right
Model Sta. - In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM - J_{27}

GENERAL DESCRIPTION: Six underwing engines installed in three nacelle pods. Inlet has long cowl, 0° or 7° cowl lip angle, short flow diverter, 0° diverter lip angle.

MODEL SCALE: 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS: (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	224.50	9.092
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118
Wetted		
Base		

	Wing Pods		Q. POD	
Nacelle Sta. 0.0 @	Outb'd	Inh'd	Left	Right
Model Sta - In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM - J_{58}

GENERAL DESCRIPTION: Six underwing engines installed in three nacelle pods. Inlet has long cowl, 0° or 7° cowl lip angle, long flow diverter, 0° diverter lip angle.

MODEL SCALE: 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS: (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	224.50	9.092
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118
Wetted		
Base		

	Wing Pods		℄ Pod	
Nacelle Sta. 0.0 @	Outb'd	Inb'd	Left	Right
Nodal Sta.- In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM - J_{29}

GENERAL DESCRIPTION: Six underwing engines installed in three nacelle pods. Inlet has short cowl, 7° cowl lip angle, short flow diverter, 7° diverter lip angle.

MODEL SCALE = 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS: (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Planform Capture	1900.92	3.118
Wetted		
Base		

	Wing Pods		℄ Pod	
Nacelle Sta. 0.0 @	Outb'd	Inb'd	Left	Right
Model Sta. - In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM - J_{30}

GENERAL DESCRIPTION: Six underwing engines installed in three nacelle pods. Inlet has short cowl, 7° cowl lip angle, long flow diverter, 7° diverter lip angle.

MODEL SCALE = 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS: (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio	———	———
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118
Wetted	———	———
Base	———	———

	Wing Pods		℄ Pod	
Nacelle Sta. 0.0 @	Out'd	Inb'd	Left	Right
Model Sta. - In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM - Jet

GENERAL DESCRIPTION: Six underwing engines installed in three nacelle pods Inlet has short cowl, 7° cowl lip angle, no diverter with gap between engines filled flush to cowl lip.

MODEL SCALE: 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS: (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118
Wetted		
Base		

	Wing Pods		℄ Pod	
Nacelle Sta. 0.0 @	Outb'd	Inb'd	Left	Right
Model Sta. = In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEMS - J_{32}

GENERAL DESCRIPTION: Six underwing engines installed in three nacelle pods. Inlet has short cowl, 7° cowl lip angle, no diverter, with gap between engines closed (from a station 0.4 inches, model scale, behind cowl lip).

MODEL SCALE: 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118

	Wing Pods		℄ Pod	
Nacelle Sta. 0.0 @	Outb'd	Inb'd	Left	Right
Model Sta. - In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEMS - J_{33}

GENERAL DESCRIPTION: Six underwing engines installed in three nacelle pods. Inlet has short cowl, 7° cowl lip angle, no diverter, with gap between engines closed (from nacelle L.E. to a station 0.4 inches, model scale, behind cowl lip), cowl lip radius increased on outboard engines.
MODEL SCALE = 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS: (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118
Wetted		
Base		

	Wing Pods		℄ Pod	
Nacelle Sta. 0.0 @	Outb'd	Inb'd	Left	Right
Model Sta. - In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEMS - $J_{3/4}$

GENERAL DESCRIPTION: Six underwing engines installed in three nacelle pods. Inlet has short cowl, 7° cowl lip angle, short flow diverter, 7° diverter lip angle, cowl lip radius increased on outboard engines.

MODEL SCALE: 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS: (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118
Wetted		
Base		

	Wing Pods		℄ Pod	
Nacelle Sta. 0.0 @	Outb'd	Inb'd	Left	Right
Model Sta. - In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.919	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : AIR BREATHING PROPULSION SYSTEM - J_{35}

GENERAL DESCRIPTION : Two underwing ℄ engines and four overwing engines installed in three nacelle pods. Inlet has short cowl, 7° cowl lip angle, short flow diverter, 7° diverter lip angle, cowl lip radius increased on outb'd engine only.

DRAWING NUMBER : SS-A00139

DIMENSIONS : Each Nacelle:	FULL SCALE	MODEL SCALE
Length - in.	209.51	8.485
Max Width - in.	66.00	2.673
Max Depth - in.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118
Wetted		
Base		

	Wing Pods		℄ Pod	
Nacelle Sta. 0.0 @	Outb'd	Inb'd	Left	Right
Model Sta. - in.	38.475	38.475	38.475	38.475
Waterplane - in.	15.390	15.390	9.434	9.434
Buttock plane - in.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence	0.0	0.0	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEMS - J_{36}

GENERAL DESCRIPTION: Four underwing engines installed in two nacelle pods. Inlet has short cowl, 7° cowl lip angle, short flow diverter, 7° diverter lip angle, cowl lip radius increased on outboard engines.

MODEL SCALE: 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio	———	———
Area - Ft^2		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118

Nacelle Sta. 0.0 @	Wing Pods Outb'd	Wing Pods Inb'd
Model Sta. - In.	38.475	38.475
Waterplane - In.	10.041	10.041
Buttock Plane - In.	± 11.583	± 8.910
Incidence - Deg.	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEMS - J_{37}

GENERAL DESCRIPTION: External lines simulation of six underwing engines installed in three nacelle pods. No internal lines, no cowl or diverter. Pod is a completely hollow, flow-through tube.

MODEL SCALE: 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS (EACH NACELLE)	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118

Nacelle Sta. 0.0 @	Wing Pods		℄ Pod	
	Outb'd	Inb'd	Left	Right
Model Sta. - In.	38.475	38.475	38.475	38.475
Waterplane - In.	10.041	10.041	9.434	9.434
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEMS - J38

GENERAL DESCRIPTION: External simulation of two underwing ℄ engines and four overwing engines installed in three nacelle pods. No internal lines, no cowl or diverter. Pod is a completely hollow, flow-through tube.

MODEL SCALE: 0.0405

DRAWING NUMBER: SS-A00139

DIMENSIONS (EACH NACELLE):	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - Ft^2		
Max Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118

	Wing Pods		℄ Pods	
Nacell Sta. 0.0 ℄	Outboard	Inboard	Left	Right
Model Sta. - In.	38.475	38.475	38.475	38.475
Waterplane - In.	15.390	15.390	0.0	0.0
Buttock Plane - In.	± 11.583	± 8.910	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM - J39

GENERAL DESCRIPTION: Two engines installed in one underwing nacelle pod. Inlet has short cowl, 7° cowl lip angle, short flow diverter, 7° diverter lip angle.

MODEL SCALE: 0.0405

DRAWING NUMBER: 63-A00139

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length - In.	209.51	8.485
Max. Width - In.	66.00	2.673
Max. Depth - In.	66.00	2.673
Fineness Ratio		
Area - In.		
Max. Cross-Sectional	2737.30	4.490
Capture	1900.92	3.118

Nacelle Sta. 0.0 @	℄ Pod Left	Right
Model Sta. - In.	38.475	38.475
Waterplane - In.	9.434	9.434
Buttock Plane- In.	- 1.342	+ 1.342
Incidence - Deg.	3.933	3.933

TABLE III (Continued)

MODEL COMPONENT: Rudder - R_3

GENERAL DESCRIPTION: Rudder used with centerline vertical V_3

Model Scale = .0405

DRAWING NUMBER:

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area-a ft of hingeline, ft^2	115.63	0.190
Span (equivalent) in	223.34	9.045
Inb'd equivalent chord	97.09	3.932
Outb'd equivalent chord	52.02	2.107
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	34.889	34.889
Tailing Edge	26.361	26.361
Hingeline	34.889	34.889
Area Moment (Normal to hinge line) ft^3	647.77	0.043

(Product of area & mean chord)

TABLE III (Continued)

MODEL COMPONENT: Vertical V3

GENERAL DESCRIPTION: Centerline vertical used on body B 12 double wedge airfoil with rudder/speed brake

Scale Model .0405

DRAWING NUMBER:

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area - ft^2	404.95	0.664
Planform		
Blanketed (inc above)	32.05	.052
Span (equivalent)	289.88	11.740
Aspect Ratio	1.565	1.565
Rate of Taper	0.504	0.504
Taper Ratio	.434	.434
Dichedral Angle, degrees	-	-
Incidence Angle, degrees	-	-
Aerodynamic Twist, degrees	-	-
Toe-In Angle - deg.	0.0	0.0
Cant Angle - deg.	0.0	0.0
Sweep Back Angles, degrees		
Leading Edge	45.00	45.00
Trailing Edge	26.561	26.561
0.25 Element Line	41.150	41.150
Chords:		
Root WP 520.00	258.350	10.463
Tip, (equivalent)WP 809.885	112.123	4.541
MAC WP 645.875	194.855	7.892
Fus. Sta. of .25 MAC	1492.279	60.437
W.P. of .25 MAC	645.875	26.157
B.L. of .25 MAC	0.0	0.0
Airfoil Section 5° Half Angle Double wedge with rounded Root L.E. = 1.6% local chord.		
Tip		
EXPOSED DATA		
Area		
Span, (equivalent)		
Aspect Ratio		
Taper Ratio		
Chords		
Root		
Tip		
MAC		
Fus. Sta. of .25 MAC		
W.P. of .25 MAC		
B.L. of .25 MAC		

TABLE III (Continued)

MODEL COMPONENT: BOUNDARY LAYER TRANSITION STRIP, X_9

GENERAL DESCRIPTION: Grit located on model nose and all swept surfaces to provide forced boundary layer transition.

MODEL SCALE: 0.0405

DIMENSIONS:	MODEL SCALE
Nominal grit height, in.	
Fuselage	.0054
All surfaces except fuselage	.0076
Strip thickness, in.	0.10
Location, inches (streamwise) aft of local leading edge	1.0

TABLE III (Continued)

MODEL COMPONENT: BOUNDARY LAYER TRANSITION STRIP, X_{10}

GENERAL DESCRIPTION: Grit located on model nose and all swept surfaces and ARPS nacelles to provide forced boundary layer transition.

MODEL SCALE: 0.0405

DIMENSIONS:	MODEL SCALE
Nominal grit height, in.	
Fuselage	0.0054
All surfaces except fuselage	0.0076
Strip thickness, in.	0.10
Location, inches (streamwise) aft of local leading edge	1.0

TABLE III (Concluded)

MODEL COMPONENT: Wing, WS7

GENERAL DESCRIPTION: Double Delta Wing (75°/45° ALE)

Scale Model = 0.0405

DRAWING NUMBER: VL70-000093

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area-ft^2		
Planform	2689.38	4.411
Wetted		
Span (equivalent)	77.17	3.125
Aspect Ratio	2.214	2.214
Rate of Taper	1.176	1.176
Taper Ratio	0.209	0.209
Dichedral Angle, degrees @X/C=75.33%	3.861	3.861
Incidence Angle, degrees	3.000	3.000
Aerodynamic Twist, degrees	-	-
Toe-In Angle	-	-
Cant Angle	-	-
Sweep Back Angles, degrees		
Leading Edge	44.873	44.873
Trailing Edge	-10.242	-10.242
0.25 Element Line	35.050	35.050
Chords:		
Root (Wing Sta. 0.0)	690.19	27.953
Tip, (equivalent)	144.30	5.844
MAC	476.76	19.309
Fus. Sta. of .25 MAC	1136.12	46.013
W.P. of .25 MAC	289.44	11.722
B.L. of .25 MAC	181.03	7.330
Airfoil Section		
Root	-	-
Tip	-	-
EXPOSED DATA		
Area-ft^2	1746.87	2.865
Span, (equivalent)-ft.	59.16	2.396
Aspect Ratio	2.004	2.004
Taper Ratio	0.256	0.256
Chords-in.		
Root	562.77	22.792
Tip	144.30	5.844
MAC	394.81	15.999
Fus. Sta. of .25 MAC	1185.17	47.998
W.P. of .25 MAC	291.56	11.808
B.L. of .25 MAC	250.54	10.147
Leading Edge Cuff		
Planform Area - ft^2	121.42	0.199
L.E. Intersects Fus.@Sta.	560.00	22.680
L.E. Intersects Wing @ Sta.	1035.00	41.918

NOTES:

1. POSITIVE DIRECTIONS OF FORCE COFFICIENTS MOMENT COEFFICIENTS, AND ANGLES ARE INDICATED BY ARROWS.

2. FOR CLARITY, ORIGINS OF WIND AND STABILITY AXES HAVE BEEN DISPLACED FROM THE CENTER OF GRAVITY.

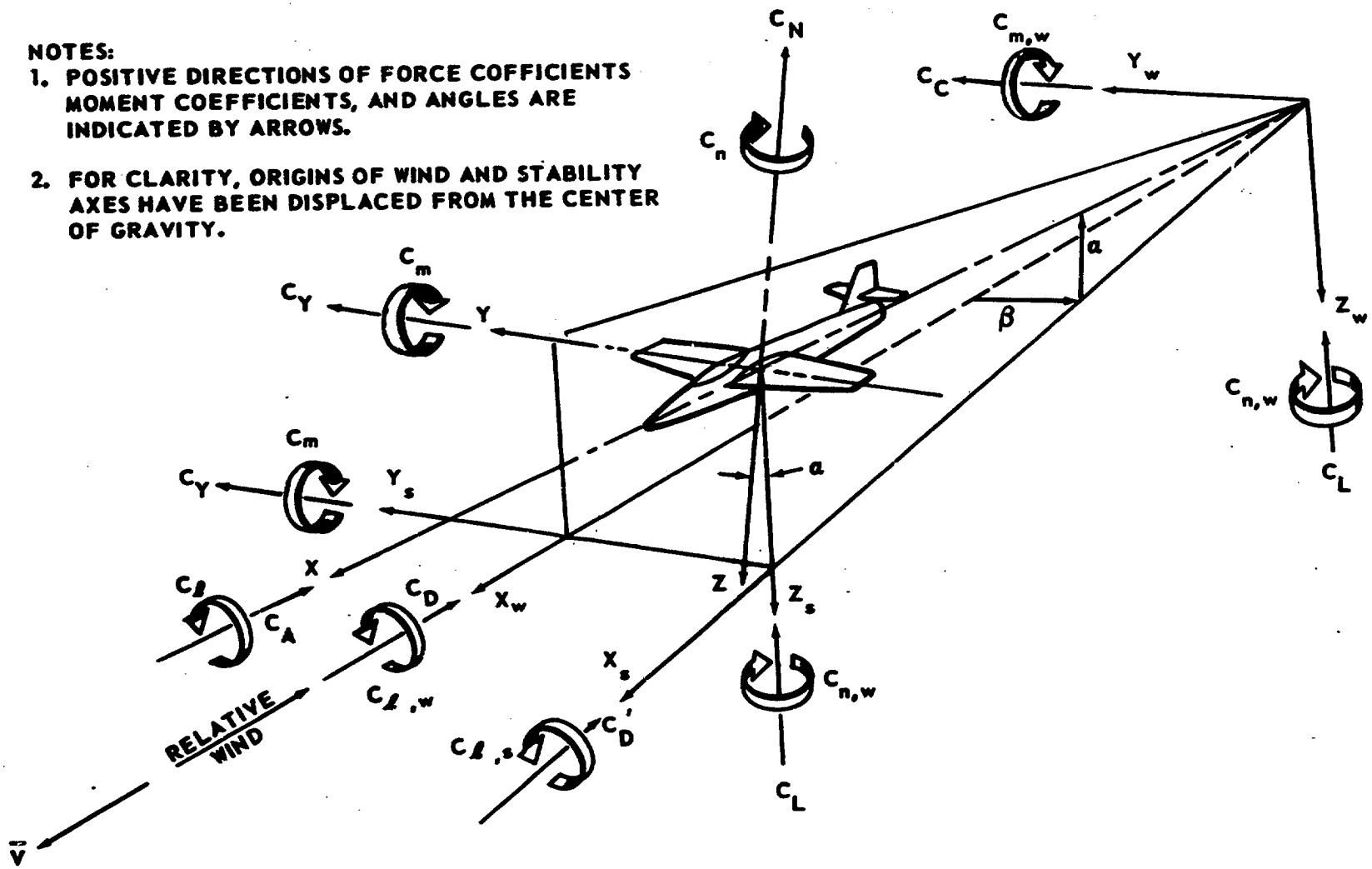
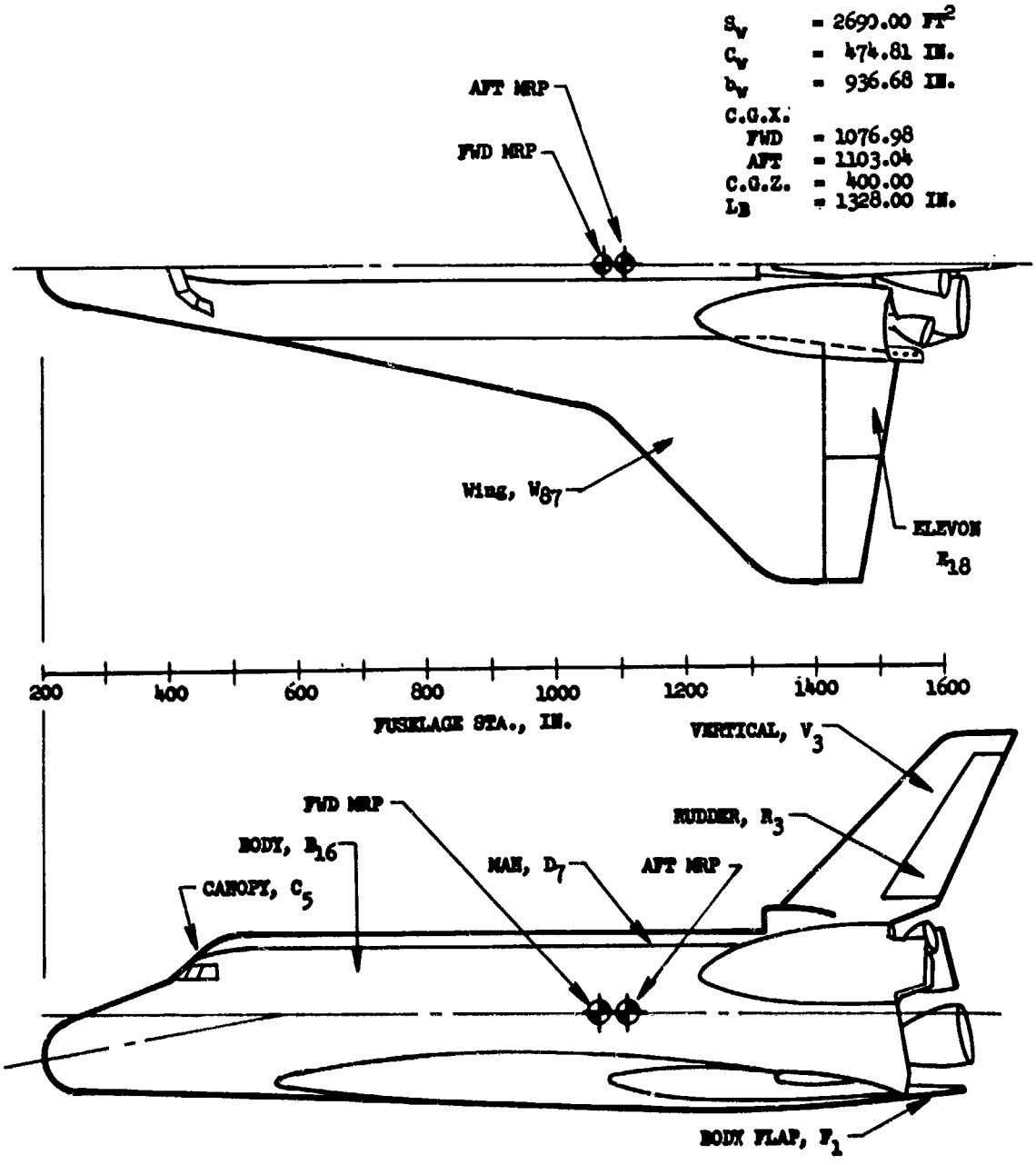
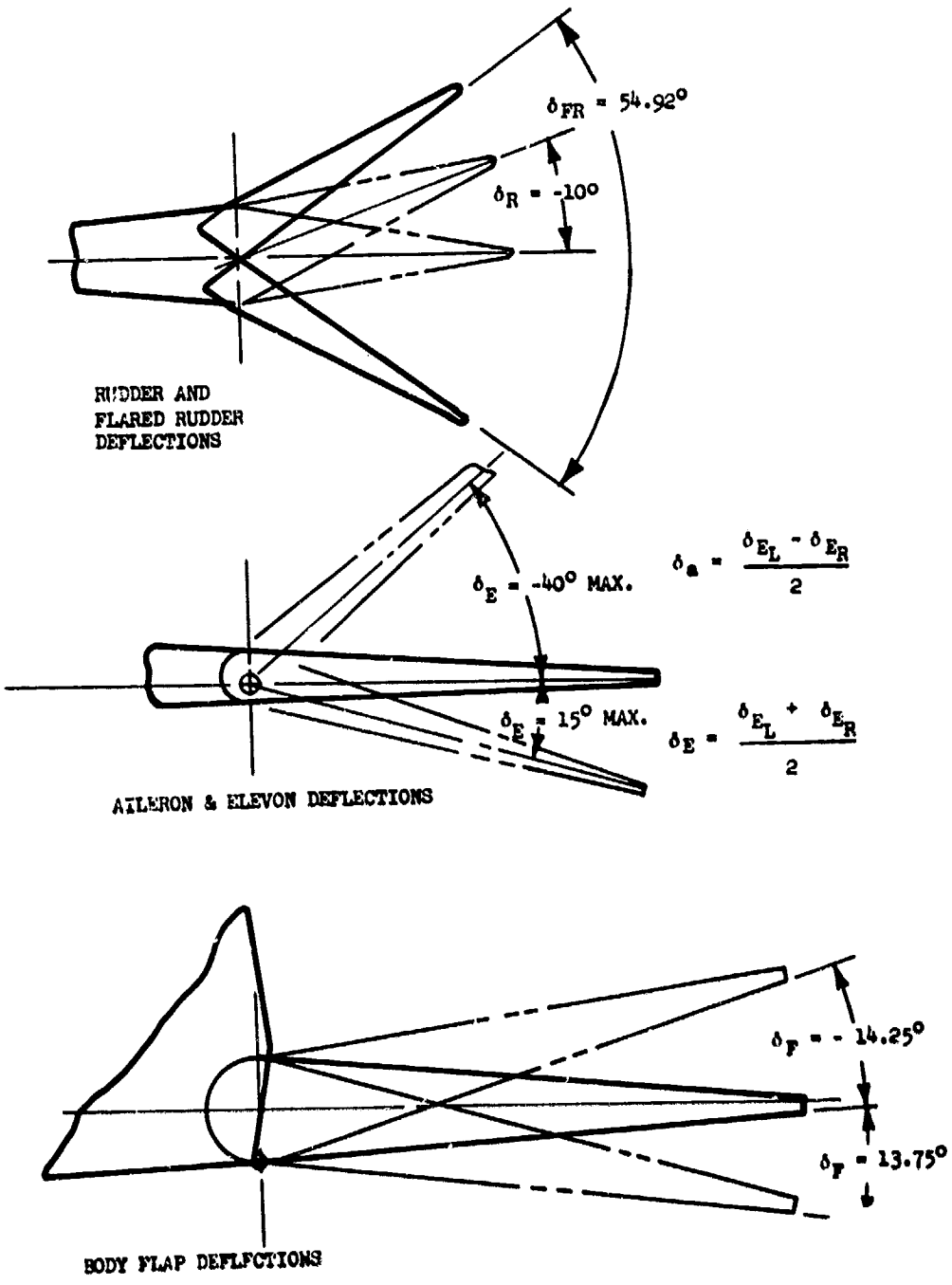


Figure 1 Axis Systems



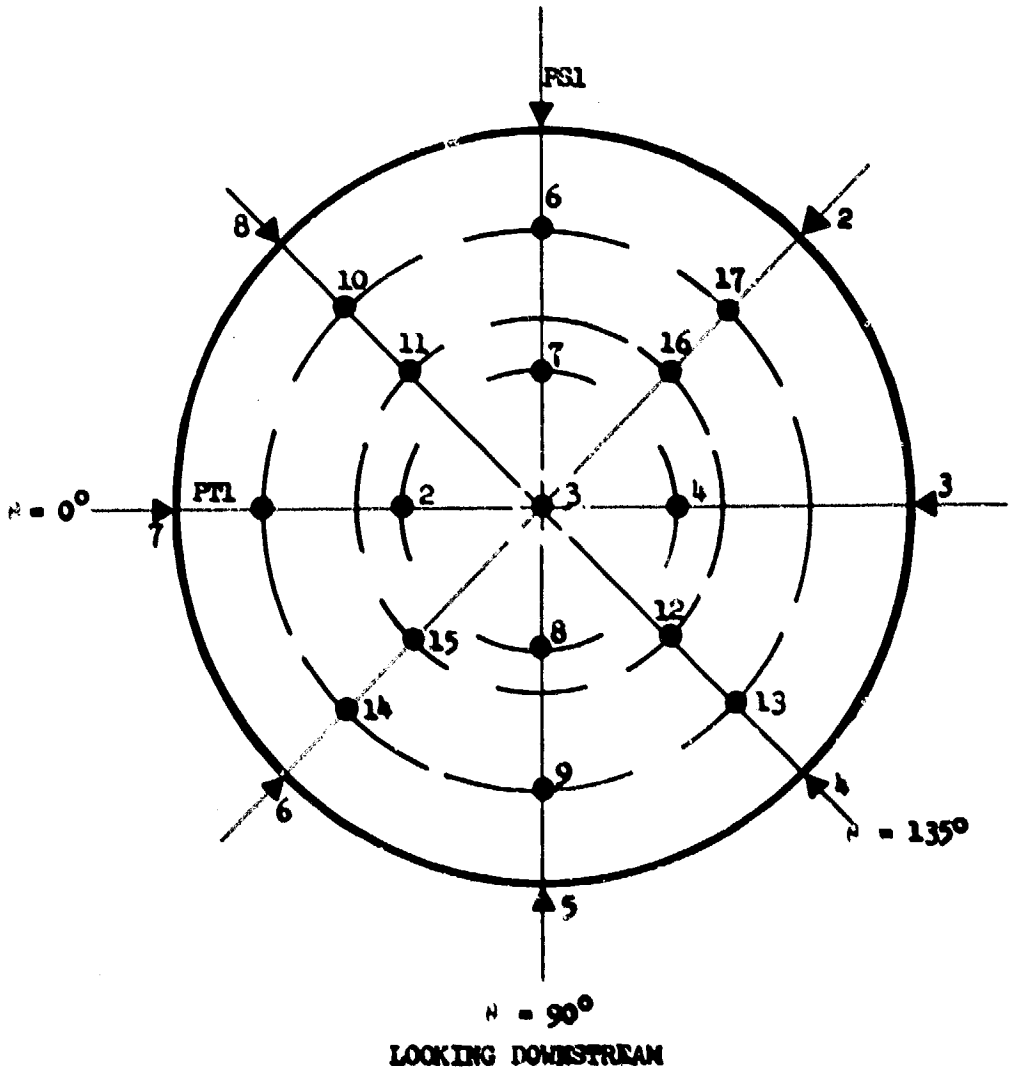
a. General Arrangement - 89B Orbiter

Figure 2. - Model Sketches.



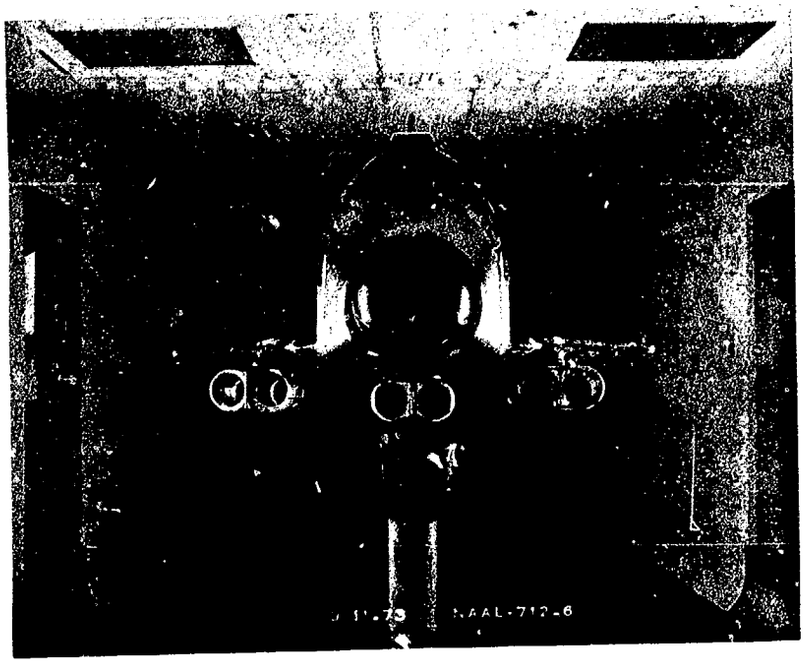
b. Sign Convention for Control Surfaces

Figure 2. - Continued.

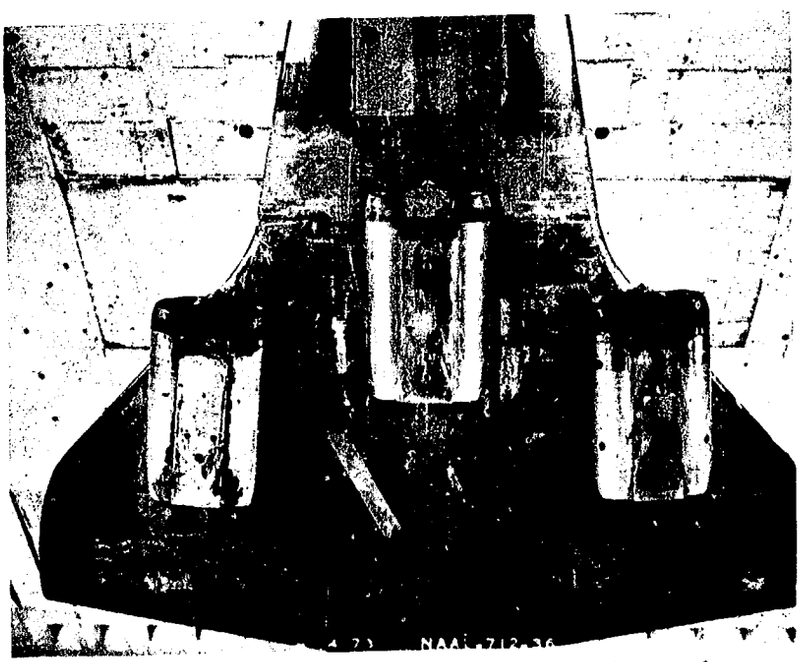


c. Nacelle Pressure General Arrangement

Figure 2. - Concluded.

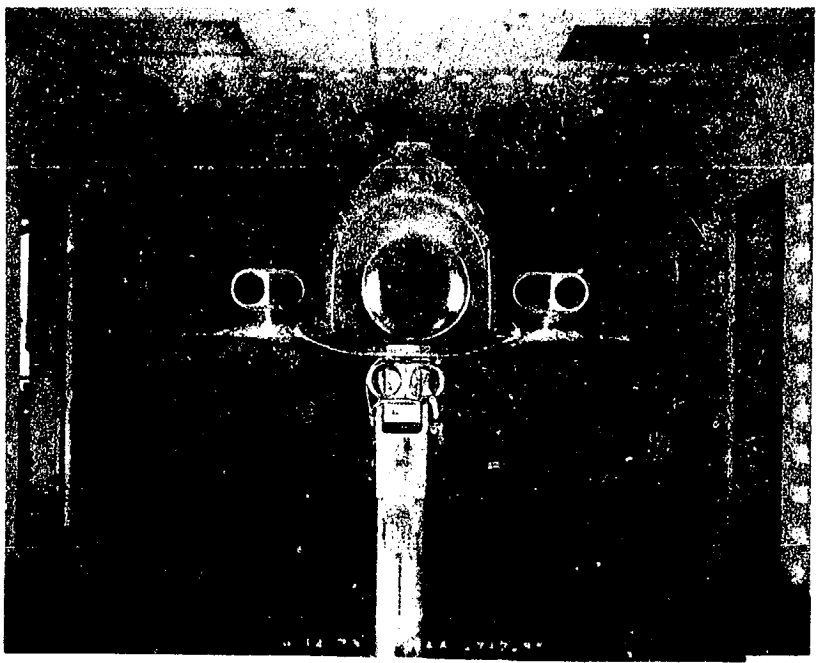


a. Front View, Underwing ABPS Configuration $B_{16}C_5D_7J_{34}F_1W_{87}E_{18}V_3R_3X_{10}$

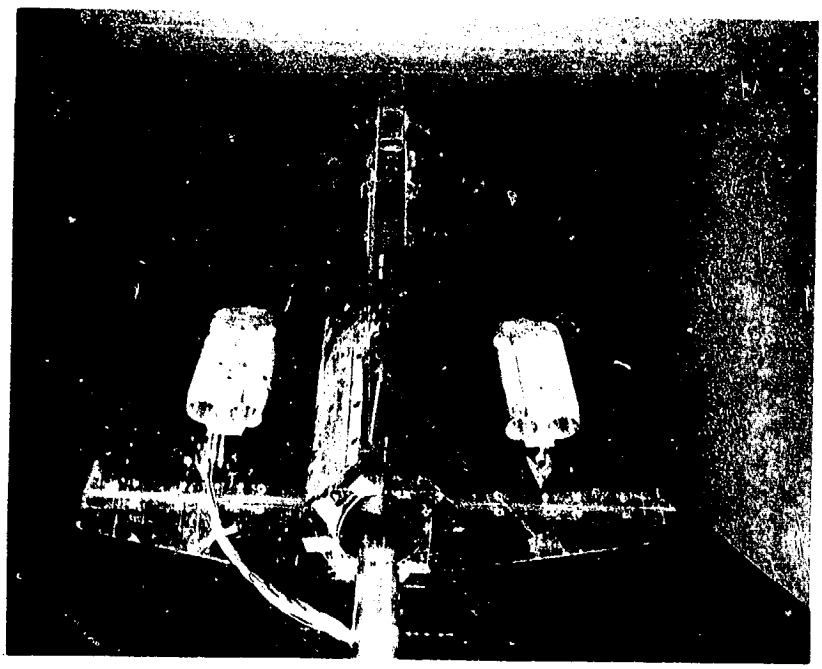


b. Bottom View, Underwing ABPS Configuration $B_{16}C_5D_7J_{34}F_1W_{87}E_{18}V_3R_3X_{10}$

Figure 3. - Model Installation Photographs.

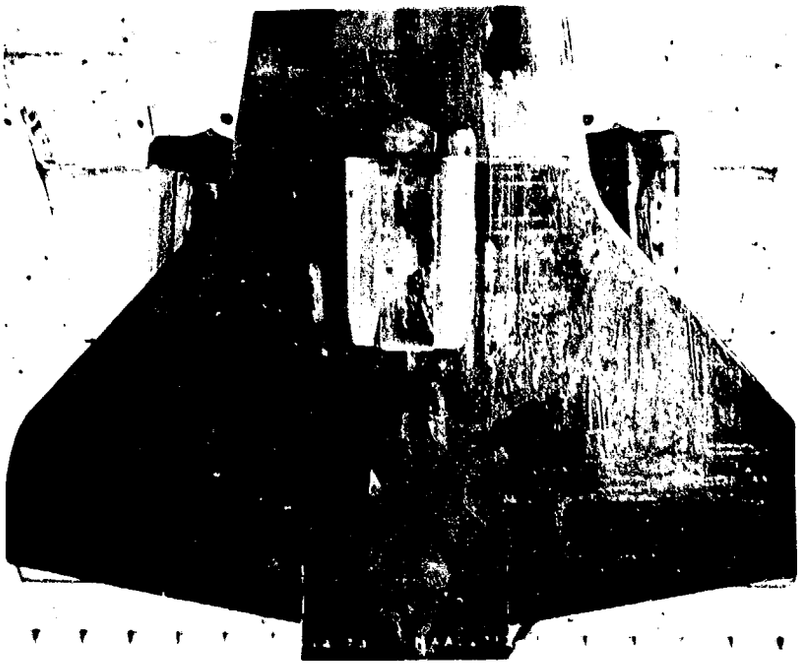


c. Front View, Overwing ABPS Configuration $B_{16}C_5D_7J_{35}F_1W_{87}E_{18}V_3R_3X_{10}$

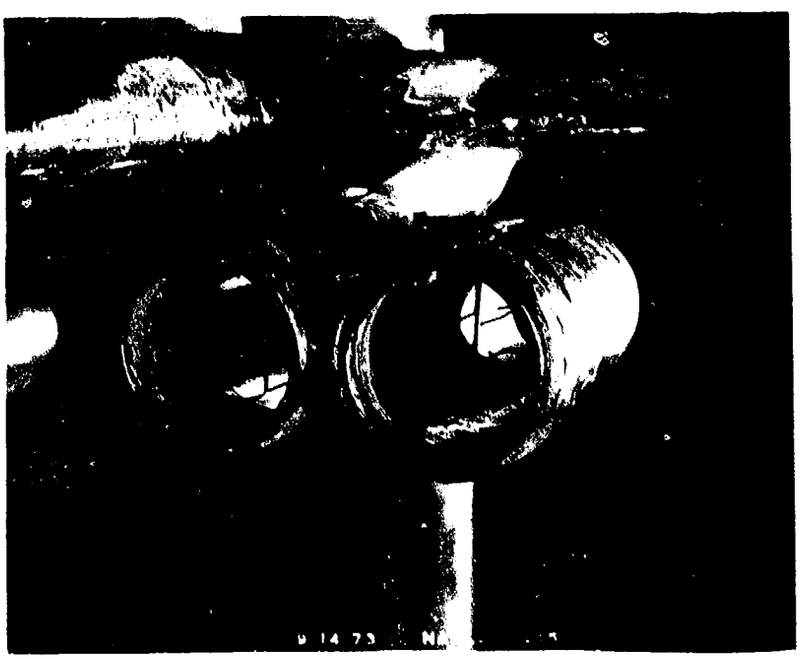


d. Rear View, Overwing ABPS Configuration $B_{16}C_5D_7J_{35}F_1W_{87}E_{18}V_3R_3X_{10}$

Figure 3. - Continued.

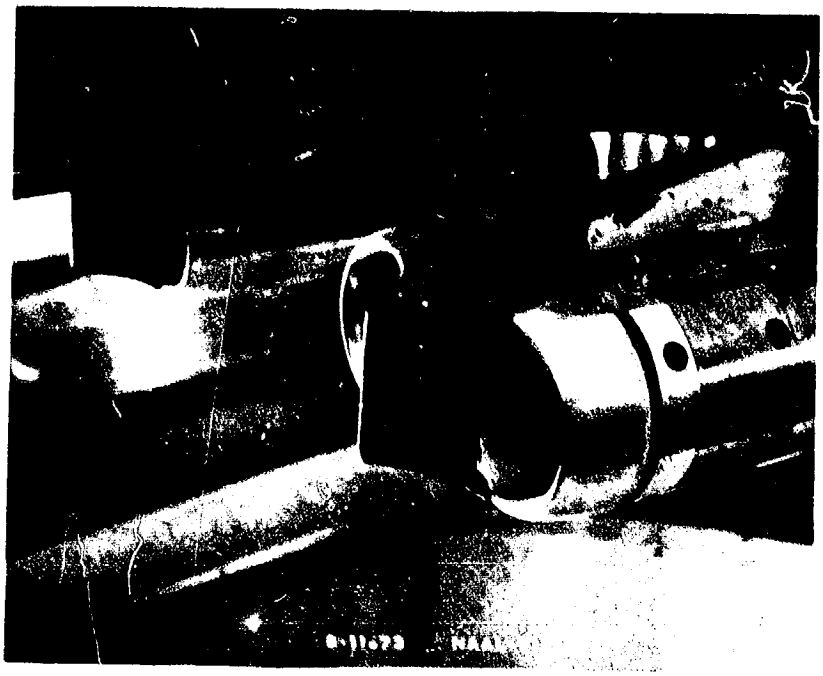


e. Bottom View, Overwing ABPS Configuration $B_{16}C_5D_7J_{35}F_1W_{87}E_{18}V_3R_3X_{10}$

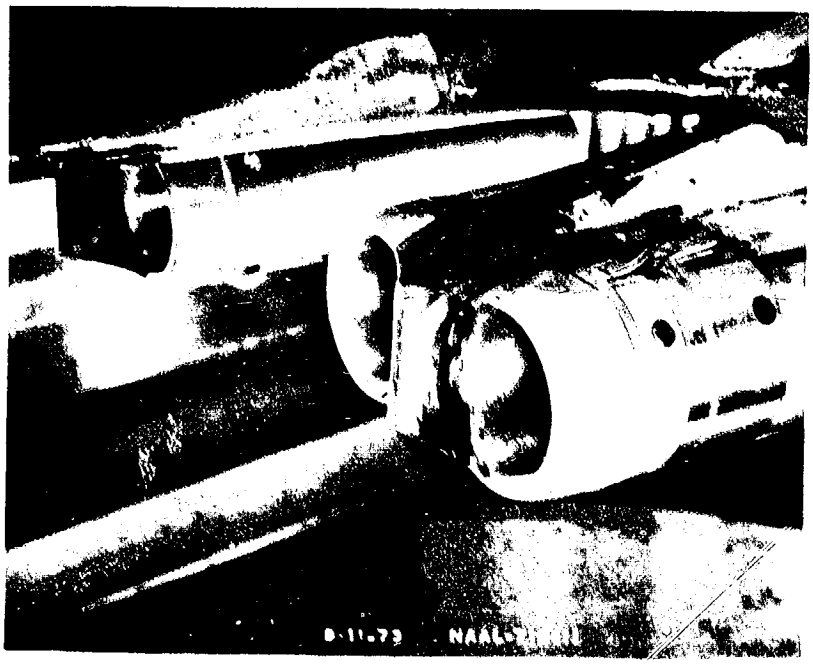


f. Front View, Nacelle J_{32} Configuration and Internal Pressure Rake Installation.

Figure 3. - Continued.



g. Front View, Nacelle J_{26} Configuration With Long Flow Diverter.



h. Front View, Nacelle J_{25} Configuration With Short Flow Diverter.

Figure 3. - Concluded.

DATA FIGURES

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	BETA
(ADU071)	○	0A71C B16CSD7 F1V87 E18V3R2X9	15.000	.000	-18.000	.000
(ADU004)	□	0A71C B16CSD7 F1V87 E18V3R3X9	5.000	.000	-18.000	.000
(ADU011)	◇	0A71C B16CSD7 F1V87 E18V3R3X9	.000	.000	-18.000	.000
(ADU006)	△	0A71C B16CSD7 F1V87 E18V3R3X9	-10.000	.000	-18.000	.000
(ADU009)	▷	0A71C B16CSD7 F1V87 E18V3R3X9	-20.000	.000	-18.000	.000
(ADU014)	D	0A71C B16CSD7 F1V87 E18V3R3X9	-30.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

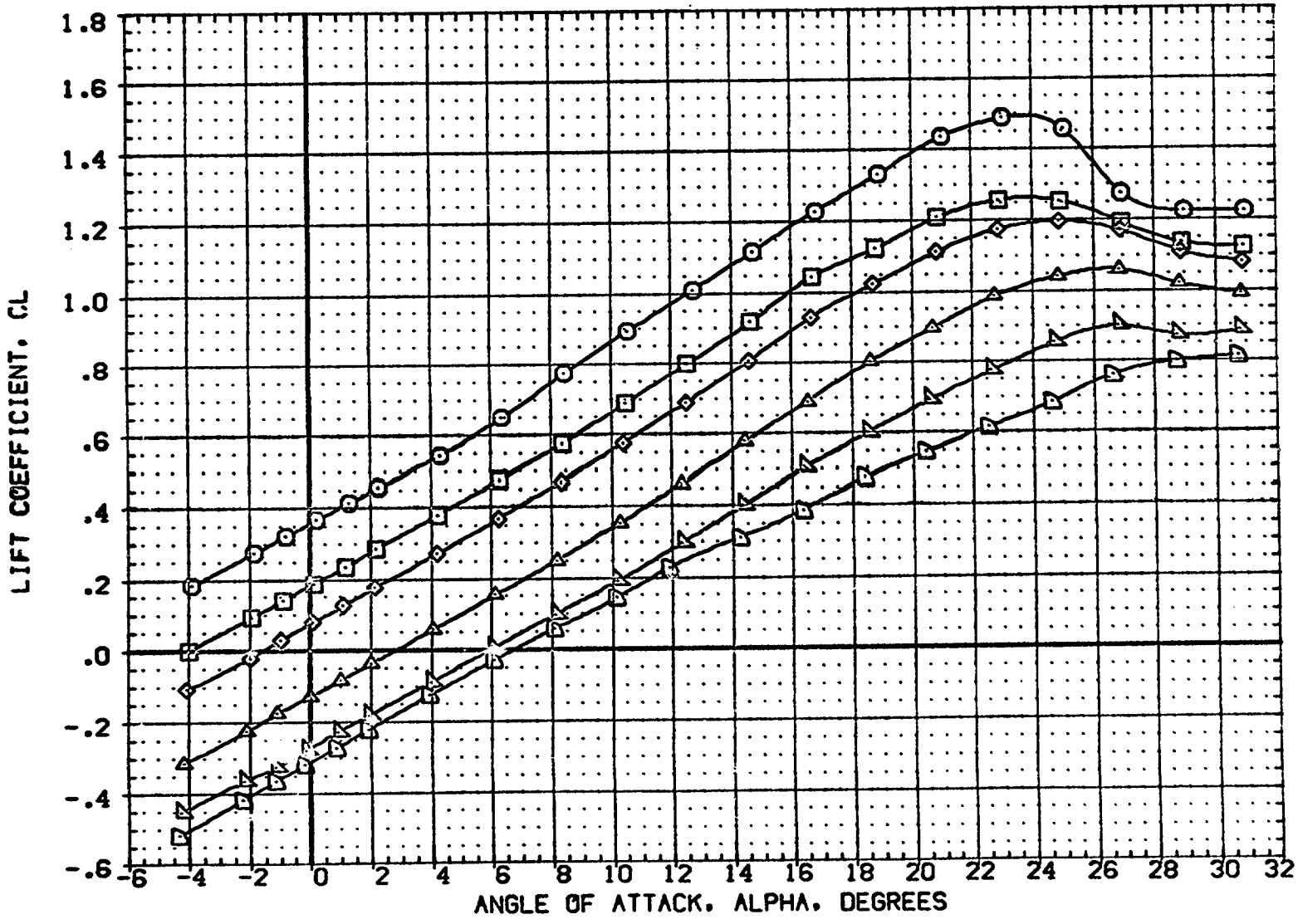


FIG 4 ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION			ELEVON	AILRON	BDFLAP	BETA
(ADU071)	○	0A71C	B16C507	F1W87 E18V3R3X9	15.000	.000	-18.000	.000
(ADU004)	□	0A71C	B16C507	F1W87 E18V3R3X9	5.000	.000	-18.000	.000
(ADU001)	◇	0A71C	B16C507	F1W87 E18V3R3X9	.000	.000	-18.000	.000
(ADU006)	△	0A71C	B16C507	F1W87 E18V3R3X9	-10.000	.000	-18.000	.000
(ADU009)	▷	0A71C	B16C507	F1W87 E18V3R3X9	-20.000	.000	-18.000	.000
(ADU014)	D	0A71C	B16C507	F1W87 E18V3R3X9	-30.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
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YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

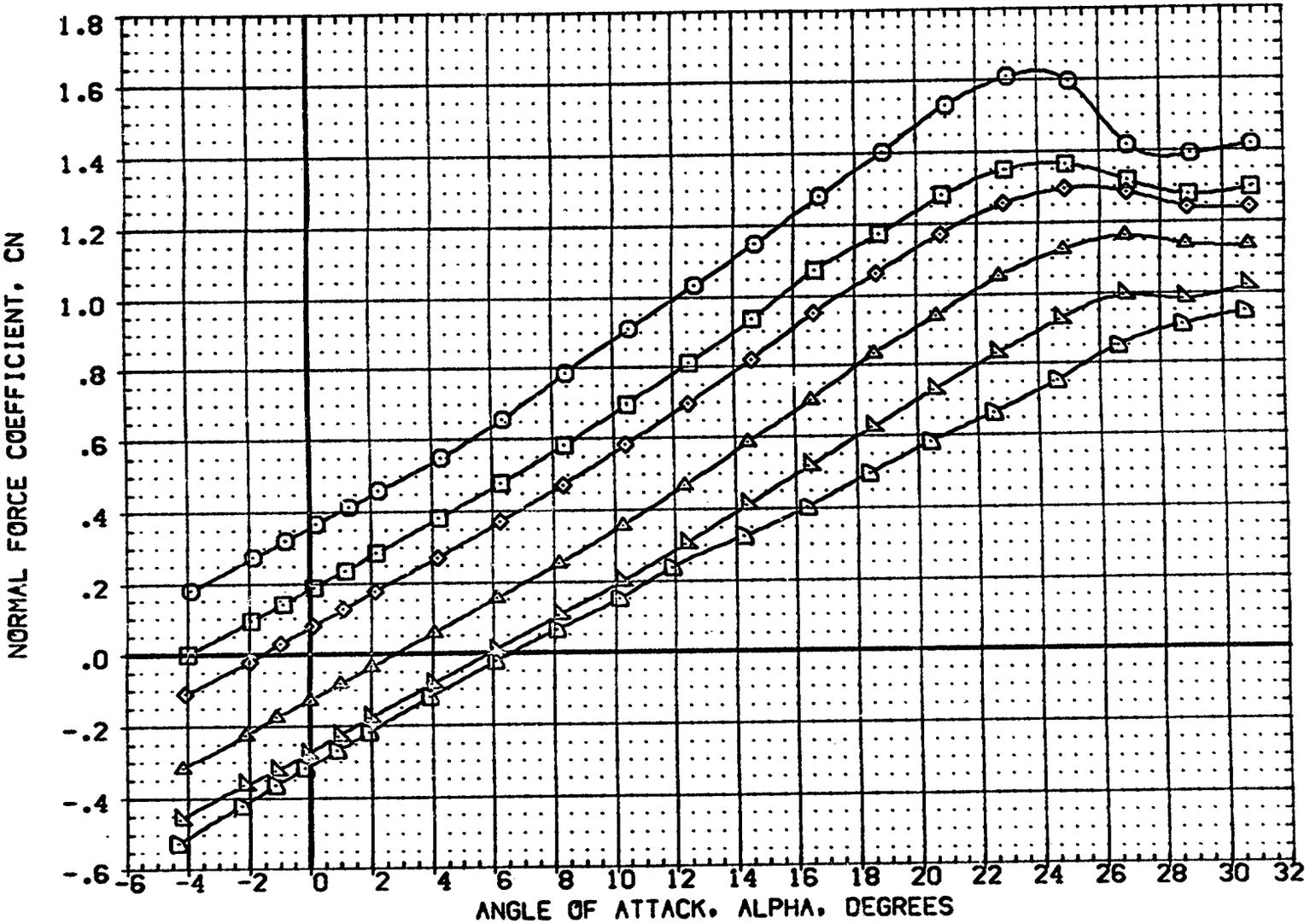


FIG 4 ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		
(ADU071)	○	0A71C	B16C507	F1W87 E18V3R3X9
(ADU004)	□	0A71C	B16C507	F1W87 E18V3R3X9
(ADU001)	◇	0A71C	B16C507	F1W87 E18V3R3X9
(ADU006)	△	0A71C	B16C507	F1W87 E18V3R3X9
(ADU009)	▽	0A71C	B16C507	F1W87 E18V3R3X9
(ADU014)	⬠	0A71C	B16C507	F1W87 E18V3R3X9

ELEVON	AILRON	BOFLAP	BETA
15.000	.000	-18.000	.000
5.000	.000	-18.000	.000
.000	.000	-18.000	.000
-10.000	.000	-18.000	.000
-20.000	.000	-18.000	.000
-30.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
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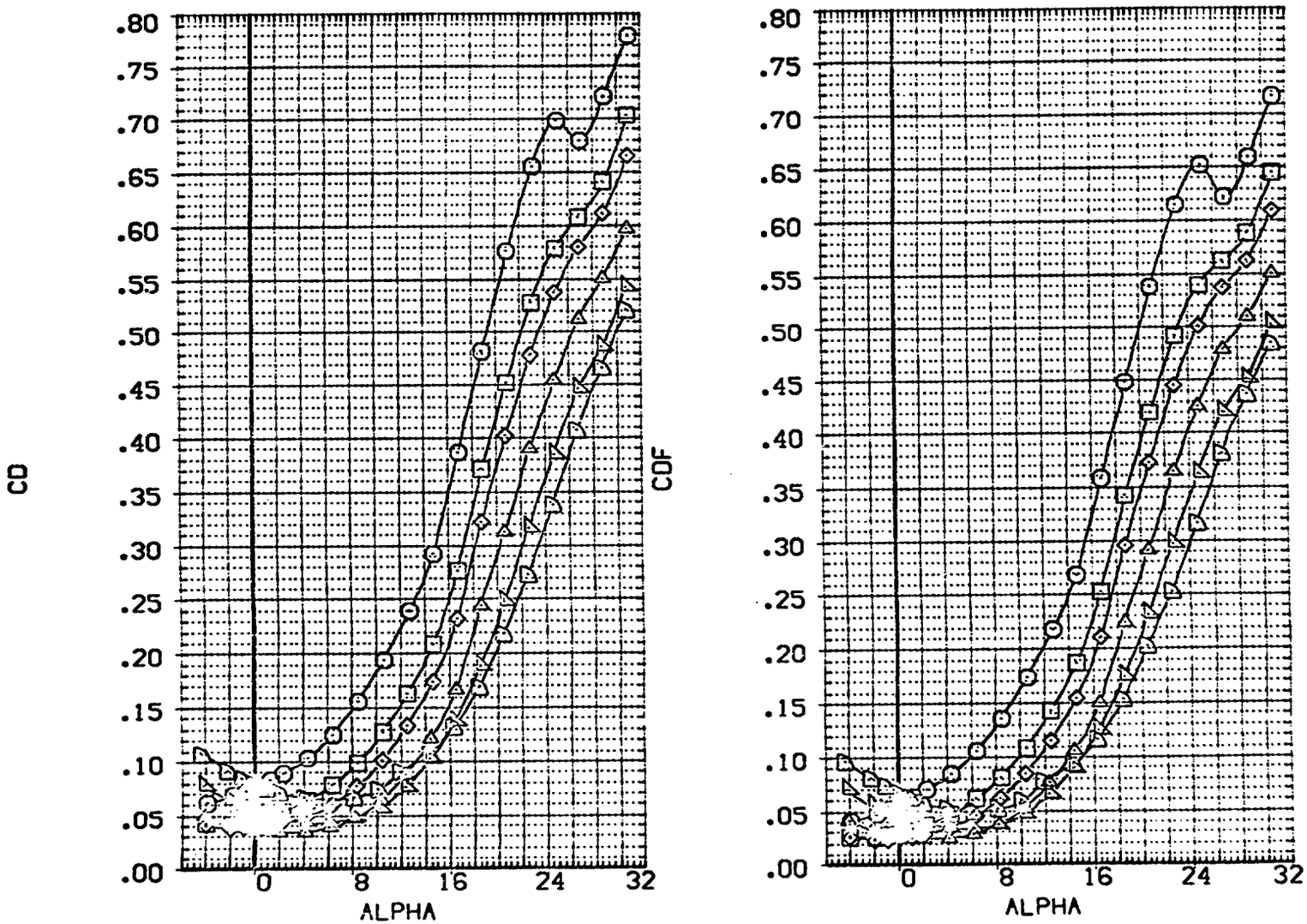


FIG 4 ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[ADL007]		CA71C B15C5C7 F1W87 E18V3R3X9
[ADL004]		CA71C B15C5C7 F1W87 E18V3R3X9
[ADL001]		CA71C B15C5C7 F1W87 E18V3R3X9
[ADL005]		CA71C B15C5C7 F1W87 E18V3R3X9
[ADL009]		CA71C B15C5C7 F1W87 E18V3R3X9
[ADL014]		CA71C B15C5C7 F1W87 E18V3R3X9

ELEVON	AILRON	BOFLAP	BETA
15.000	.000	-18.000	.000
5.000	.000	-18.000	.000
.000	.000	-18.000	.000
-10.000	.000	-18.000	.000
-20.000	.000	-18.000	.000
-30.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
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YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

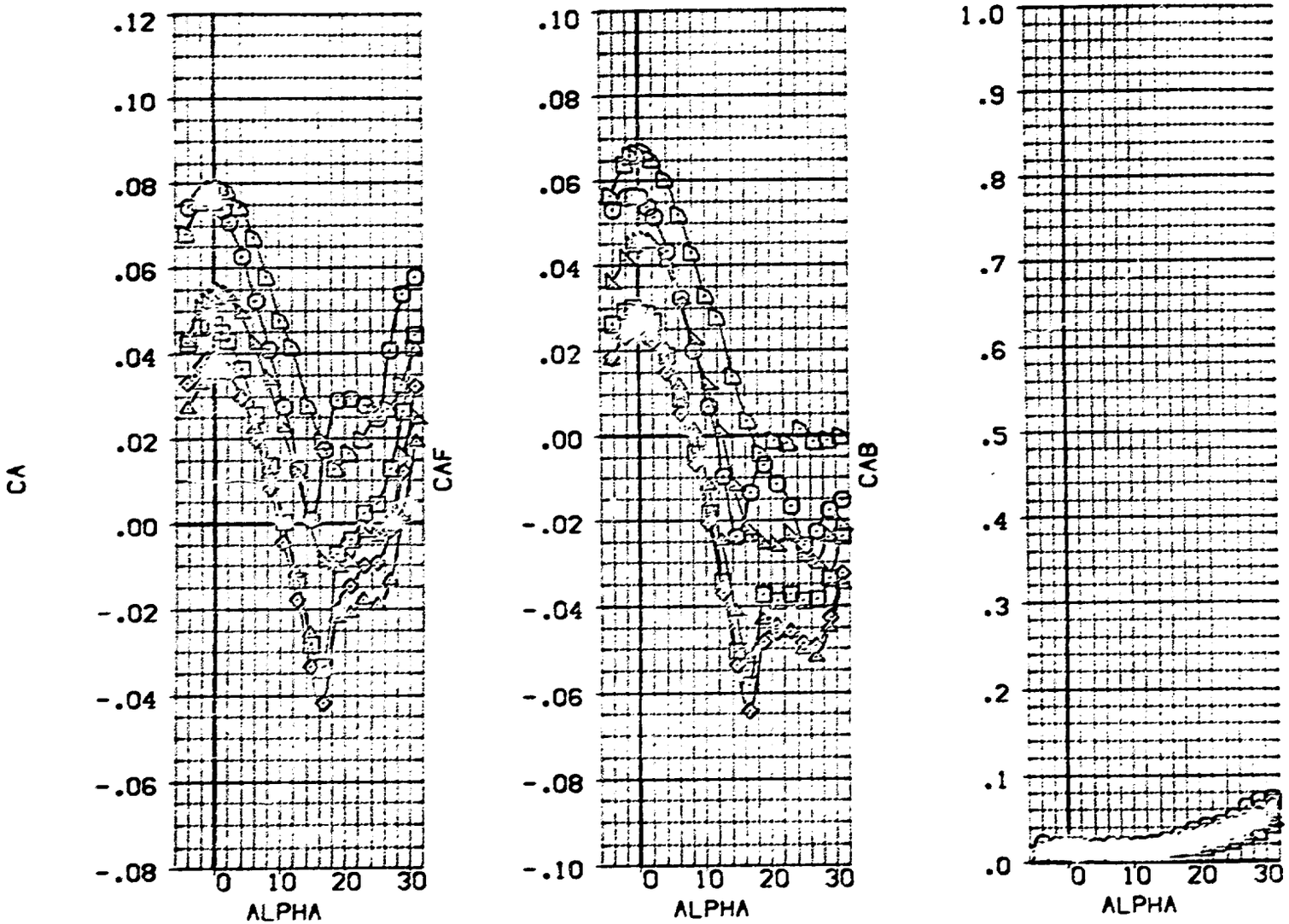


FIG 4 ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION			
(ADU071)	□	0A71C	B16CS07	F1V87	E18V3R3X9
(ADU004)	□	0A71C	B16CS07	F1V87	E18V3R3X9
(ADU001)	△	0A71C	B16CS07	F1V87	E18V3R3X9
(ADU006)	△	0A71C	B16CS07	F1V87	E18V3R3X9
(ADU009)	◇	0A71C	B16CS07	F1V87	E16V3R3X9
(ADU014)	◇	0A71C	B16CS07	F1V87	E18V3R3X9

ELEVON	AILRON	BOFLAP	BETA
15.000	.000	-18.000	.000
5.000	.000	-18.000	.000
.000	.000	-18.000	.000
-10.000	.000	-18.000	.000
-20.000	.000	-18.000	.000
-30.000	.000	-18.000	.000

REFERENCE INFORMATION		
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YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
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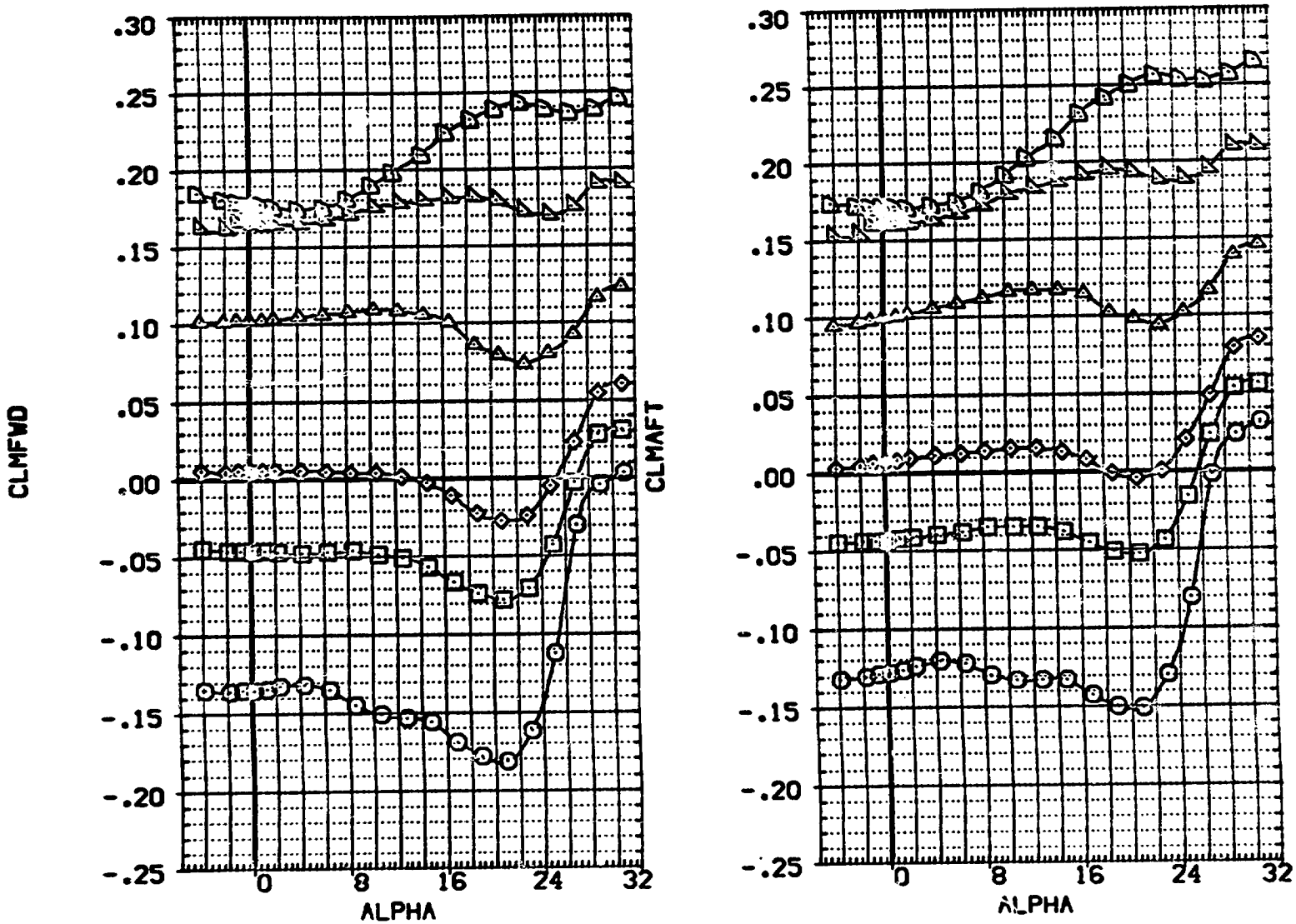


FIG 4 - ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	BETA	REFERENCE INFORMATION		
(ADU071)	□	CA71C B16CS07 F1V87 E18V3R3X9	15.000	.000	-18.000	.000	SREF	4.4122	SQ.FT.
(ADU004)	○	CA71C B16CS07 F1V87 E18V3R3X9	5.000	.000	-18.000	.000	LREF	19.2299	INCHES
(ADU001)	△	CA71C B16CS07 F1V87 E18V3R3X9	.000	.000	-18.000	.000	BREF	37.9349	INCHES
(ADU005)	◇	CA71C B16CS07 F1V87 E18V3R3X9	-10.000	.000	-18.000	.000	XMRP	43.5974	INCHES
(ADU009)	▽	CA71C B16CS07 F1V87 E18V3R3X9	-20.000	.000	-18.000	.000	YMRP	.0000	INCHES
(ADU014)	◁	CA71C B16CS07 F1V87 E18V3R3X9	-30.000	.000	-18.000	.000	ZMRP	16.2000	INCHES
							SCALE	.0405	SCALE

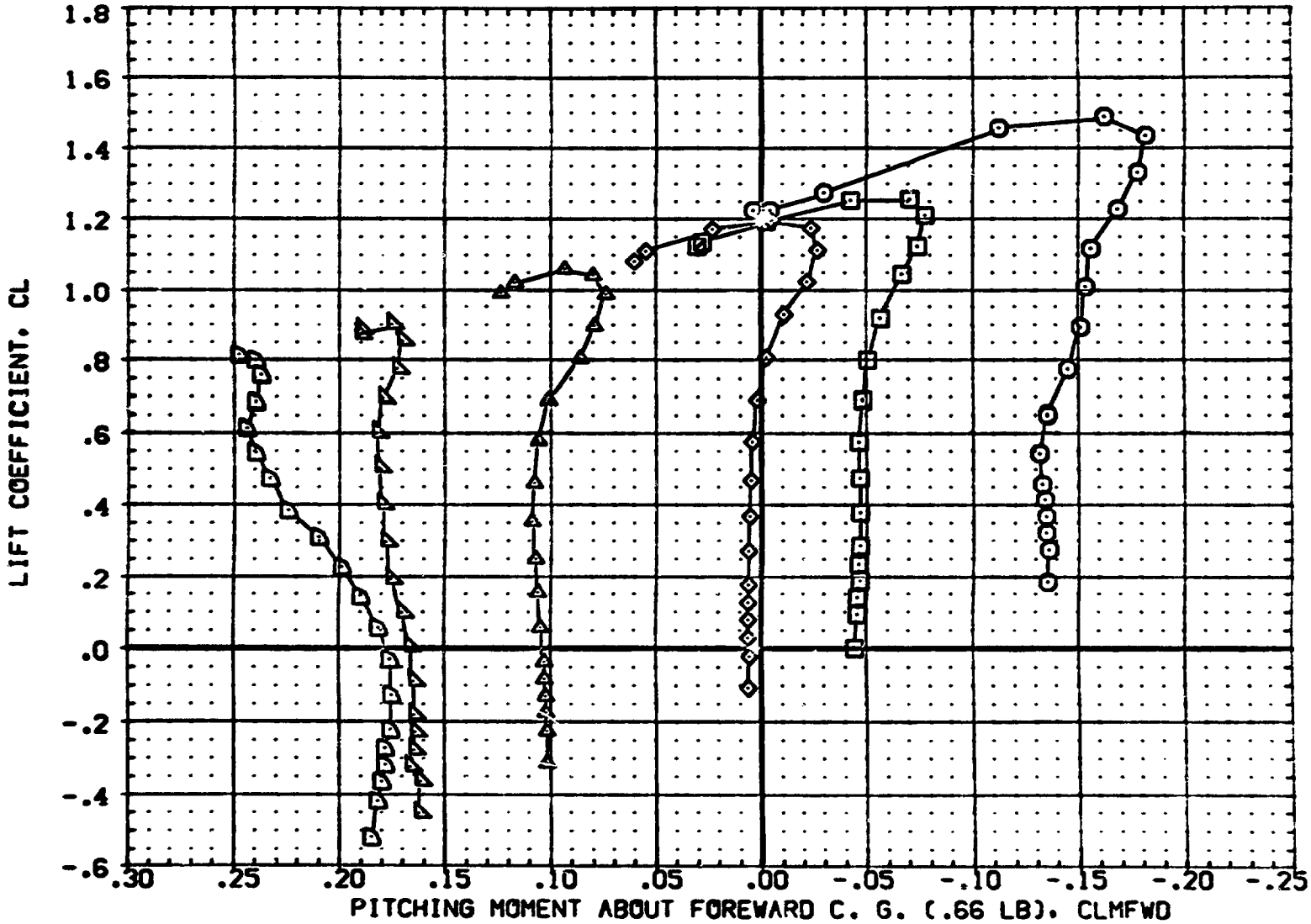


FIG 4 ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	BETA
(ADU071)	□	GA71C B16C507 F1V87 E18V3R3X9	15.000	.000	-18.000	.000
(ADU004)	⋈	GA71C B16C507 F1V87 E18V3R3X9	5.000	.000	-18.000	.000
(ADU001)	◇	GA71C B16C507 F1V87 E18V3R3X9	.000	.000	-18.000	.000
(ADU006)	◇	GA71C B16C507 F1V87 E18V3R3X9	-10.000	.000	-18.000	.000
(ADU009)	△	GA71C B16C507 F1V87 E18V3R3X9	-20.000	.000	-18.000	.000
(ADU014)	△	GA71C B16C507 F1V87 E18V3R3X9	-30.000	.000	-18.000	.000

REFERENCE INFORMATION		
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ZMRP	16.2000	INCHES
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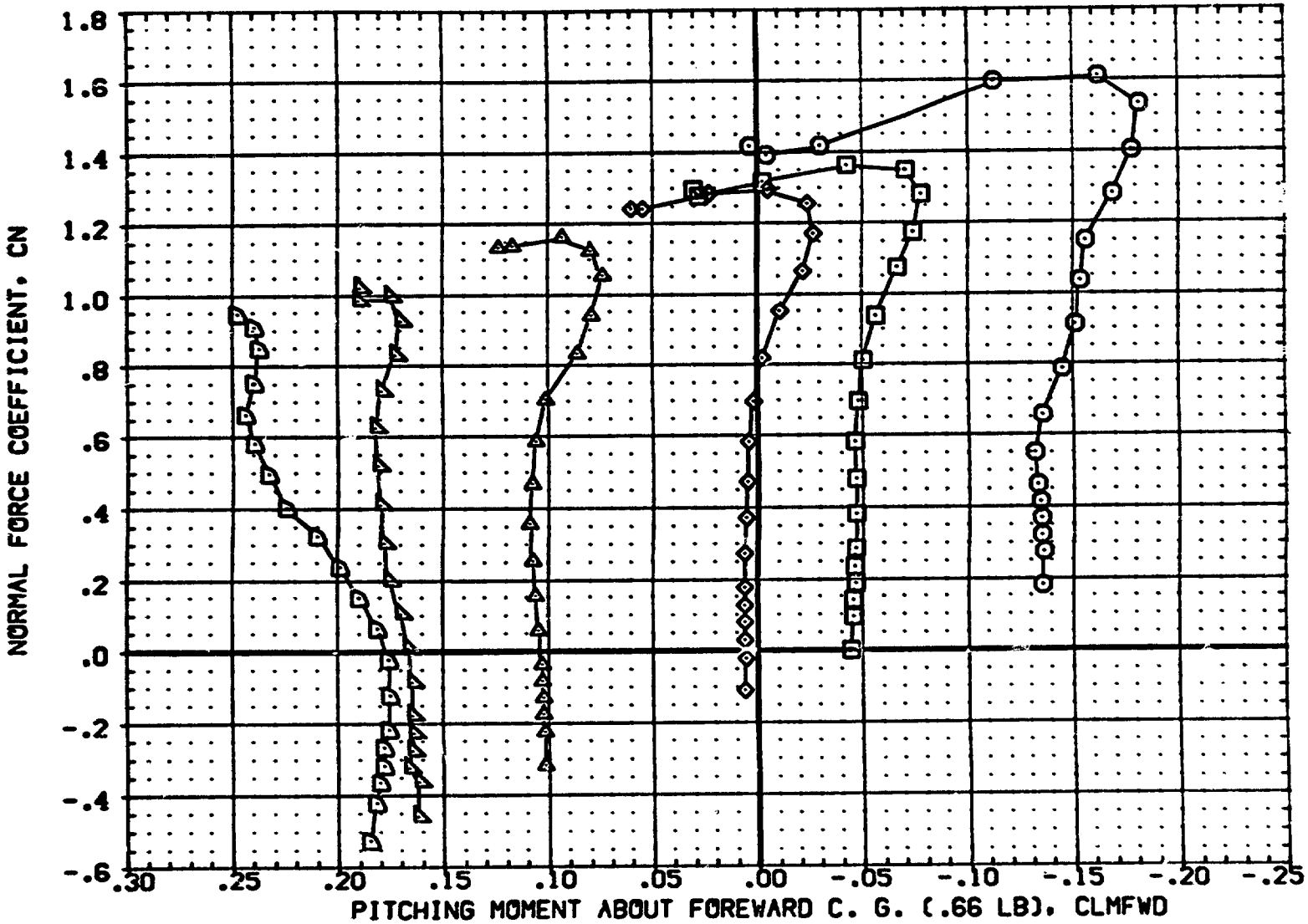


FIG 4 ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BDFLAP	BETA
(ADU071)	○	CA71C B16CSD7 F1V87 E18V3R3X9	15.000	.000	-19.000	.000
(ADU004)	□	CA71C B16CSD7 F1V87 E18V3R3X9	5.000	.000	-18.000	.000
(ADU001)	◇	CA71C B16CSD7 F1V87 E18V3R3X9	.000	.000	-18.000	.000
(ADU006)	△	CA71C B16CSD7 F1V87 E18V3R3X9	-10.000	.000	-18.000	.000
(ADU009)	▷	CA71C B16CSD7 F1V87 E18V3R3X9	-20.000	.000	-18.000	.000
(ADU014)	▷	CA71C B16CSD7 F1V87 E18V3R3X9	-30.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.3405	SCALE

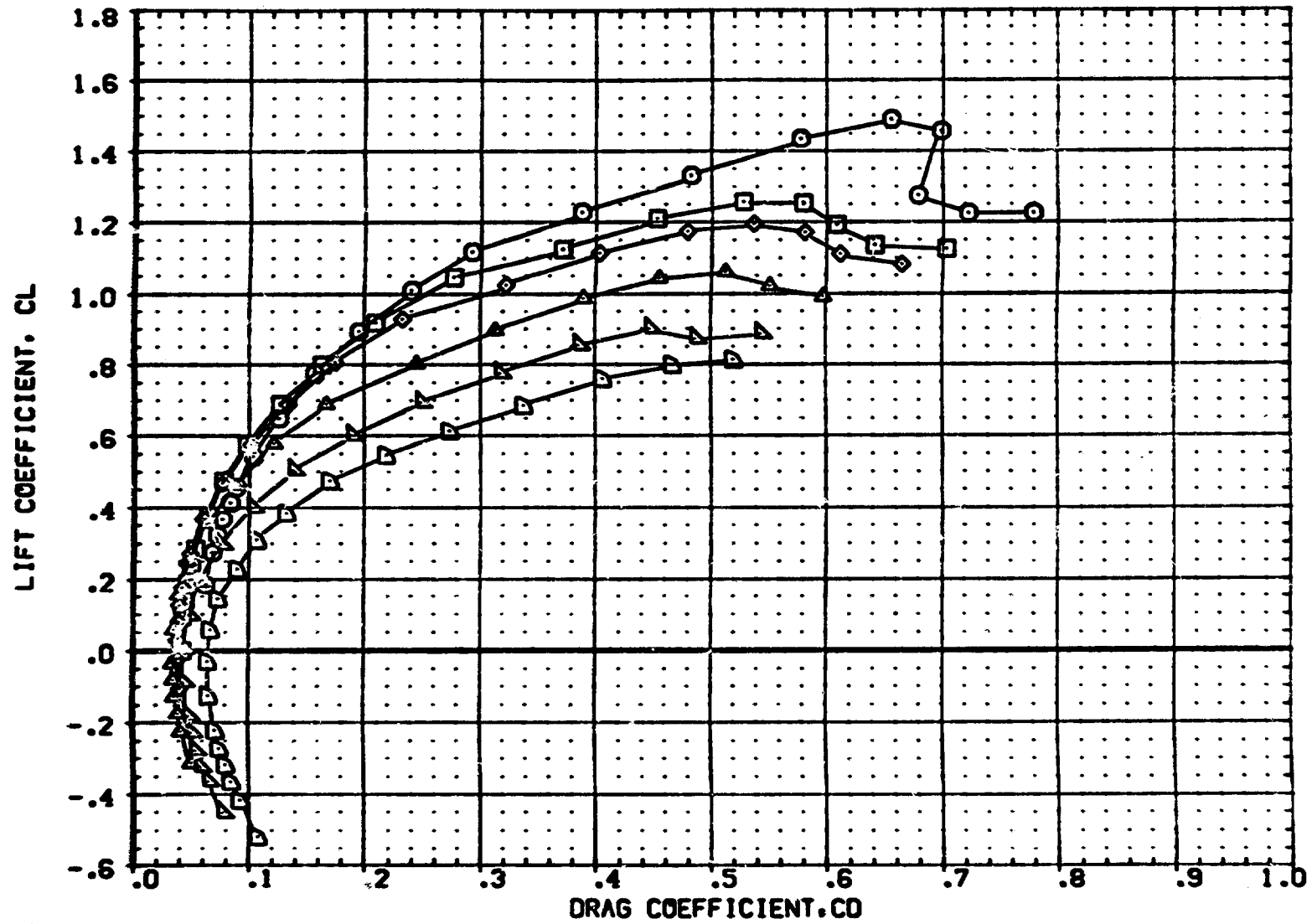


FIG 4 ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

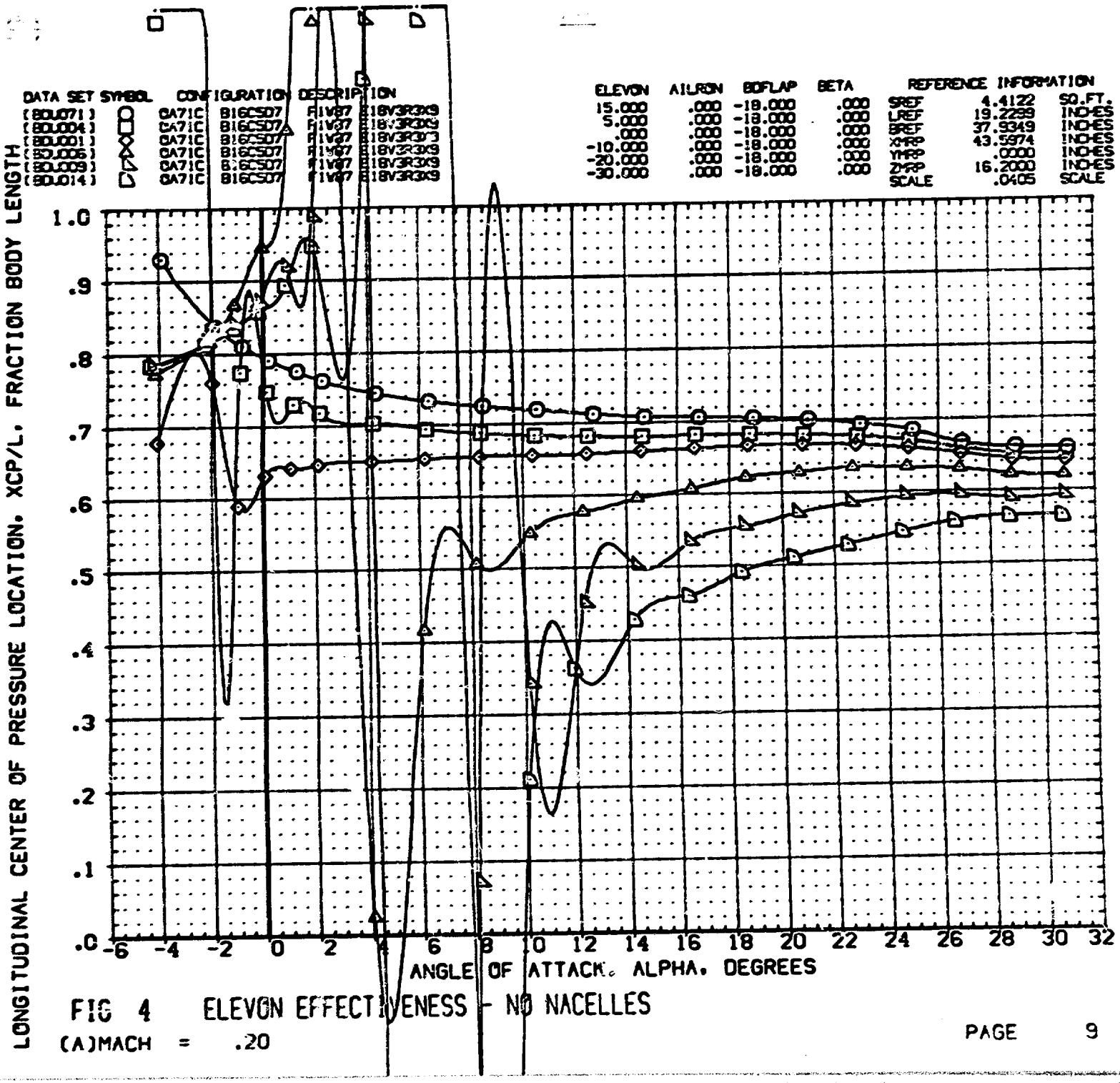


FIG 4 ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION			ELEVON	AILRON	BDFLAP	BETA
(80.071)	□	0A71C	B16C507	F1W87 E18V3R3X9	15.000	.000	-18.000	.000
(80.004)	○	0A71C	B16C507	F1W87 E18V3R3X9	5.000	.000	-18.000	.000
(80.011)	◇	0A71C	B16C507	F1W87 E18V3R3X9	.000	.000	-18.000	.000
(80.006)	△	0A71C	B16C507	F1W87 E18V3R3X9	-10.000	.000	-18.000	.000
(80.009)	▽	0A71C	B16C507	F1W87 E18V3R3X9	-20.000	.000	-18.000	.000
(80.014)	◁	0A71C	B16C507	F1W87 E18V3R3X9	-30.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ. INCHES
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

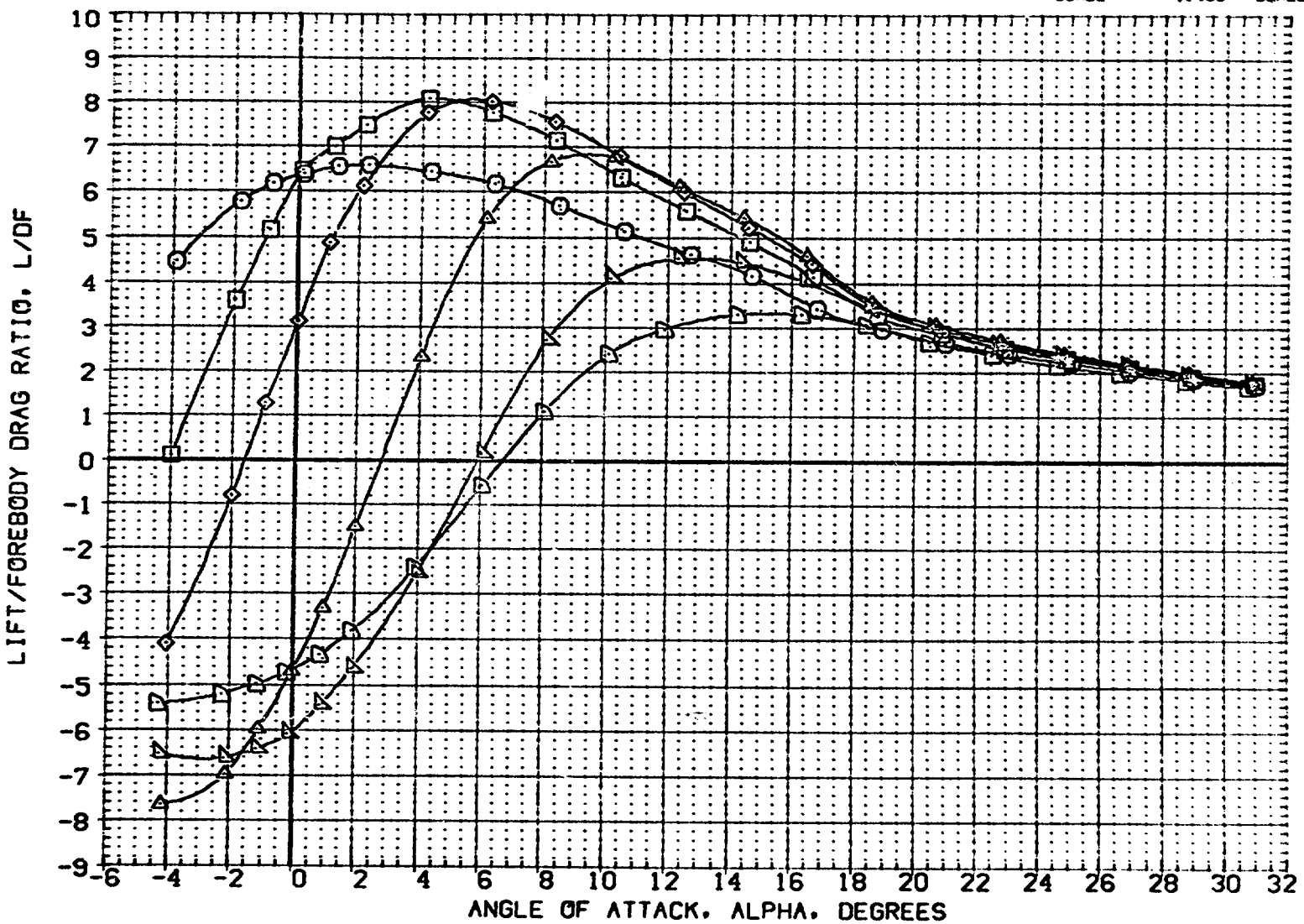


FIG 4 ELEVON EFFECTIVENESS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION			AILRON	BOFLAP	BETA	DELVON
(EDU071)	□	CA71C	B16C507	F1V87 E18V3R3X9	.000	-18.000	.000	15.000
(EDU004)	◇	CA71C	B16C507	F1V87 E18V3R3X9	.000	-18.000	.000	5.000
(EDU006)	△	CA71C	B16C507	F1V87 E18V3R3X9	.000	-18.000	.000	-10.000
(EDU009)	○	CA71C	B16C507	F1V87 E18V3R3X9	.000	-18.000	.000	-20.000
(EDU014)	◇	CA71C	B16C507	F1V87 E18V3R3X9	.000	-18.000	.000	-30.000
(EDU012)	△	CA71C	B16C507	F1V87 E18V3R3X9	.000	-18.000	.000	-40.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

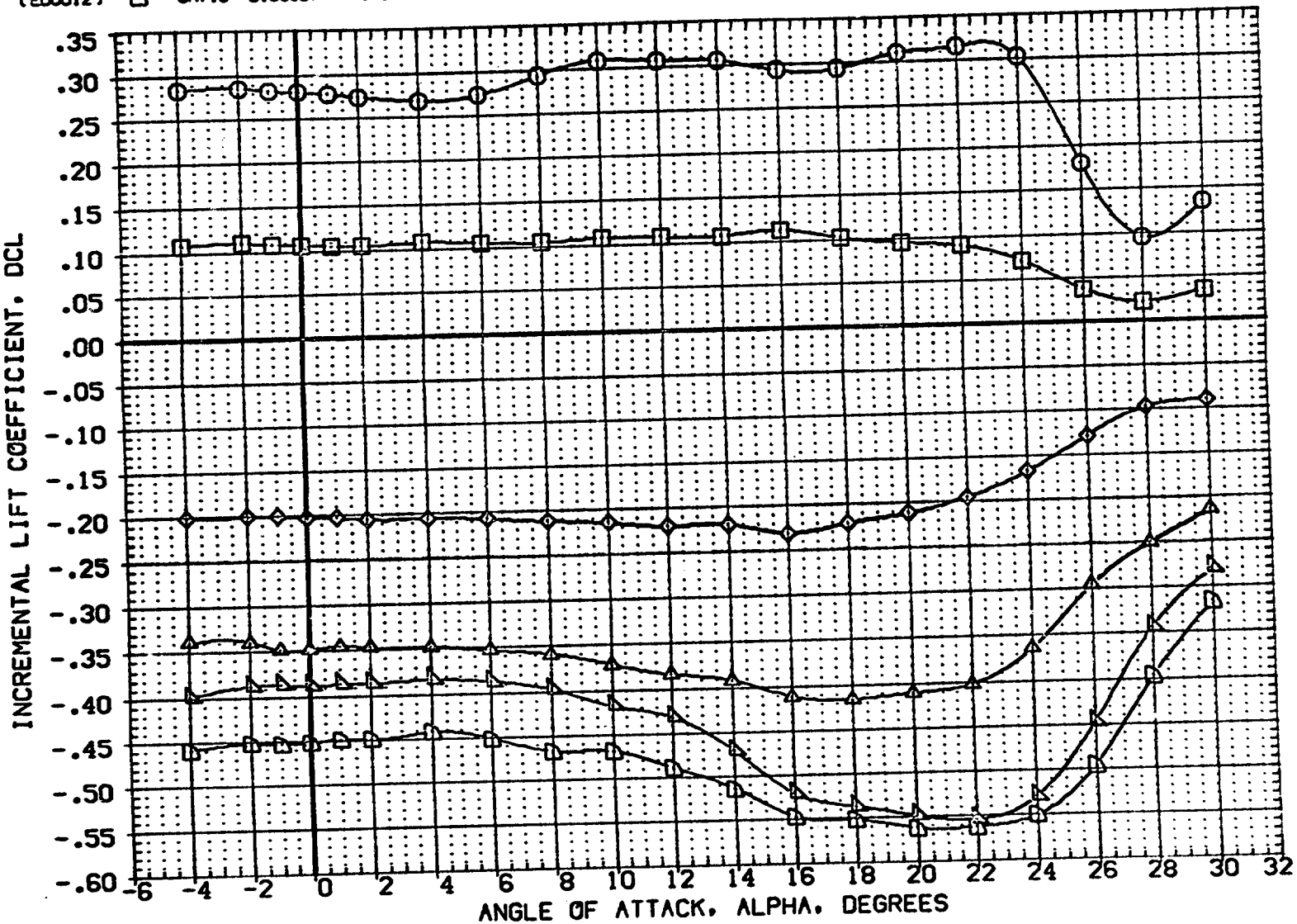


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

(A)MACH = .21

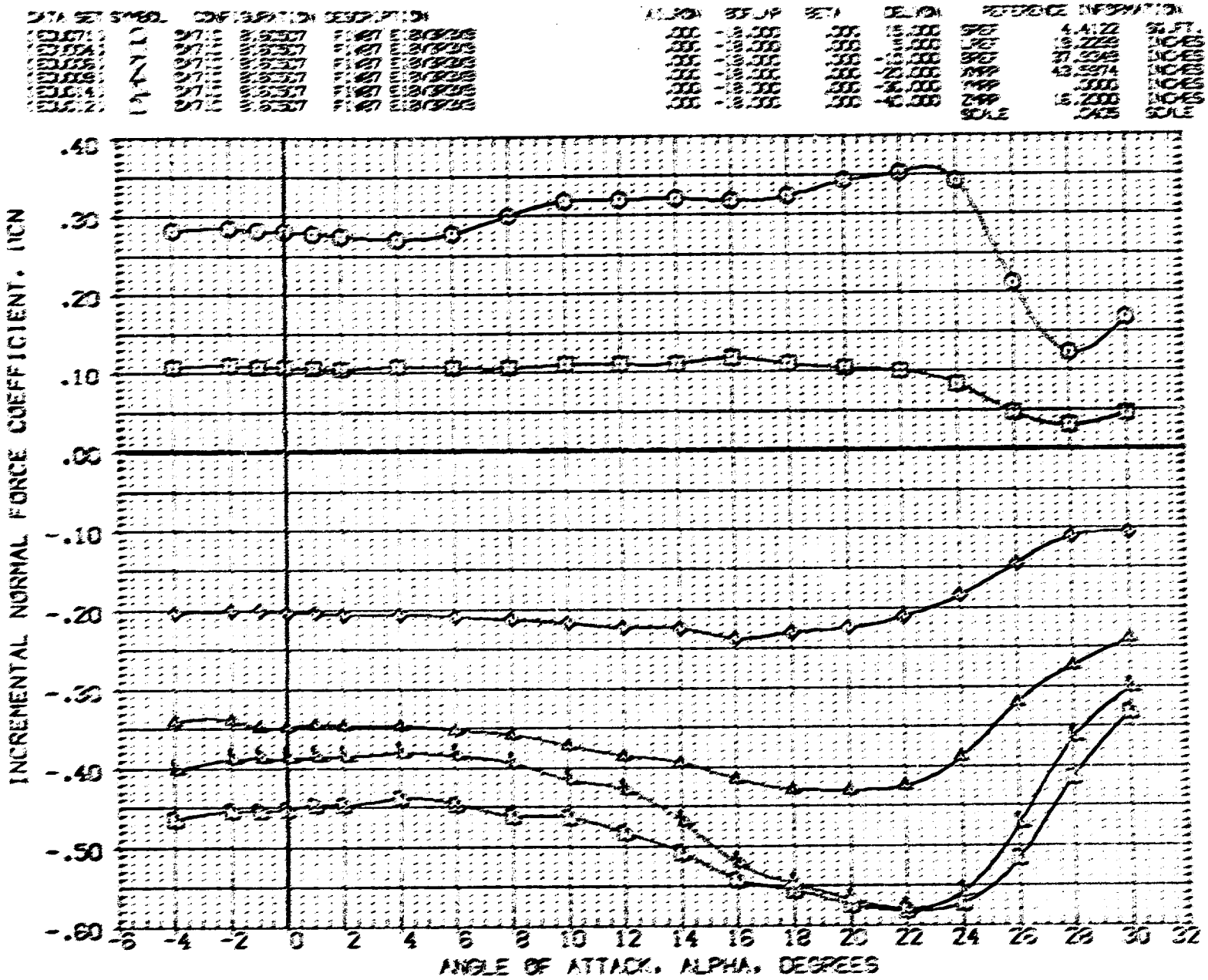


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

(A)MACH = .21

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
(EDU071)	D	CA71C B16C507	F1W87 E1BW3R3X9
(EDU004)	X	CA71C B16C507	F1W87 E1BW3R3X9
(EDU006)	4	CA71C B16C507	F1W87 E1BW3R3X9
(EDU009)	D	CA71C B16C507	F1W87 E1BW3R3X9
(EDU014)	X	CA71C B16C507	F1W87 E1BW3R3X9
(EDU012)	4	CA71C B16C507	F1W87 E1BW3R3X9

AILRON	BOFLAP	BETA	DELVON
.000	-18.000	.000	15.000
.000	-18.000	.000	5.000
.000	-18.000	.000	-10.000
.000	-18.000	.000	-20.000
.000	-18.000	.000	-30.000
.000	-18.000	.000	-40.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

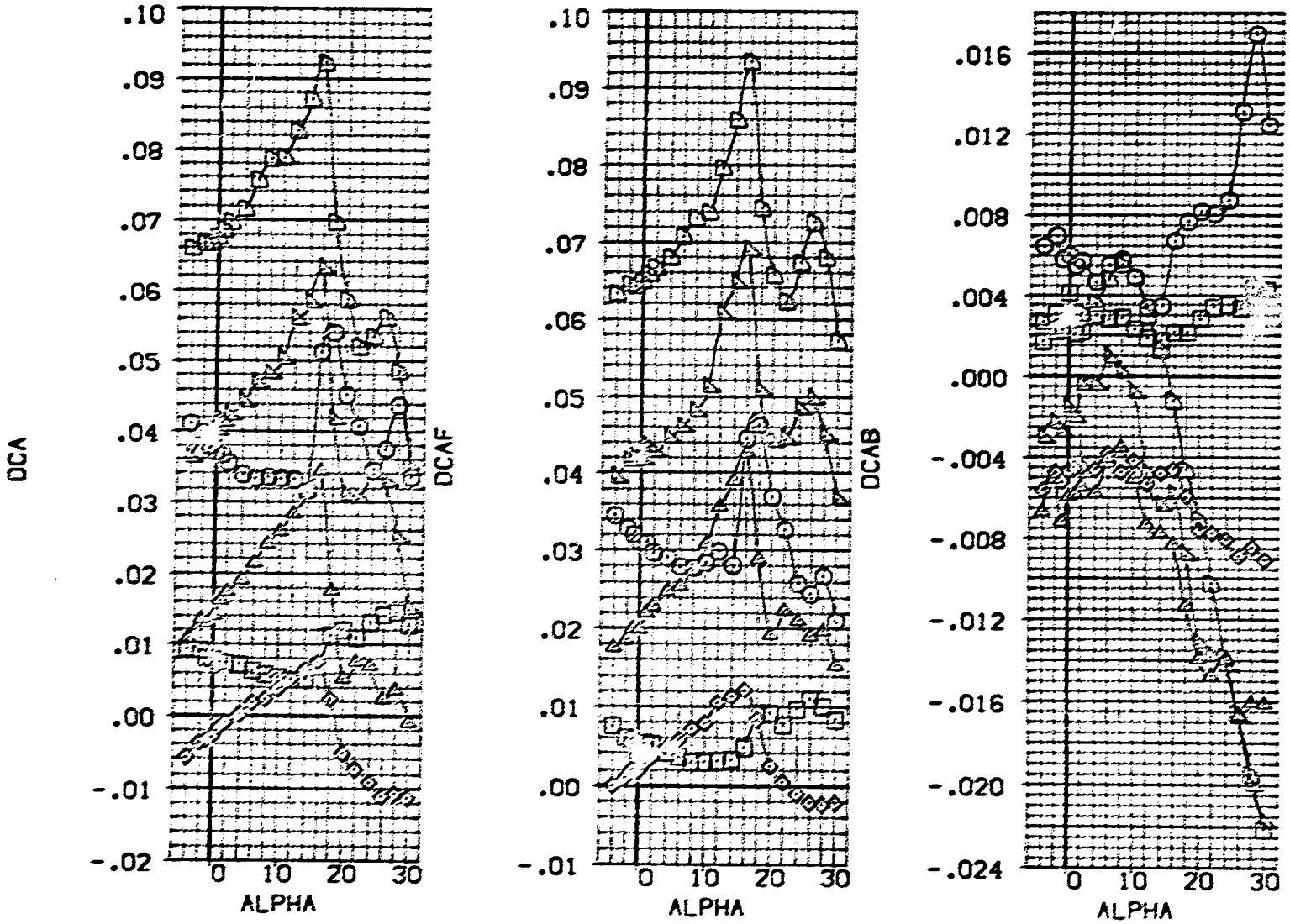


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

(A)MACH = .21

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		
(EDU071)	□	CA71C	B16C507	F1V87 E18V3R3X9
(EDU004)	□	CA71C	B16C507	F1V87 E18V3R3X9
(EDU006)	◇	CA71C	B16C507	F1V87 E18V3R3X9
(EDU009)	△	CA71C	B16C507	F1V87 E18V3R3X9
(EDU014)	△	CA71C	B16C507	F1V87 E18V3R3X9
(EDU012)	D	CA71C	B16C507	F1V87 E18V3R3X9

AILRON	BDFLAP	BETA	DELYSN
.000	-18.000	.000	15.000
.000	-18.000	.000	5.000
.000	-18.000	.000	-10.000
.000	-18.000	.000	-20.000
.000	-18.000	.000	-30.000
.000	-18.000	.000	-40.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2259	INCHES
BREF	37.9349	INCHES
XMPP	43.5974	INCHES
YMPP	.0000	INCHES
ZMPP	16.2000	INCHES
SCALE	.0405	SCALE

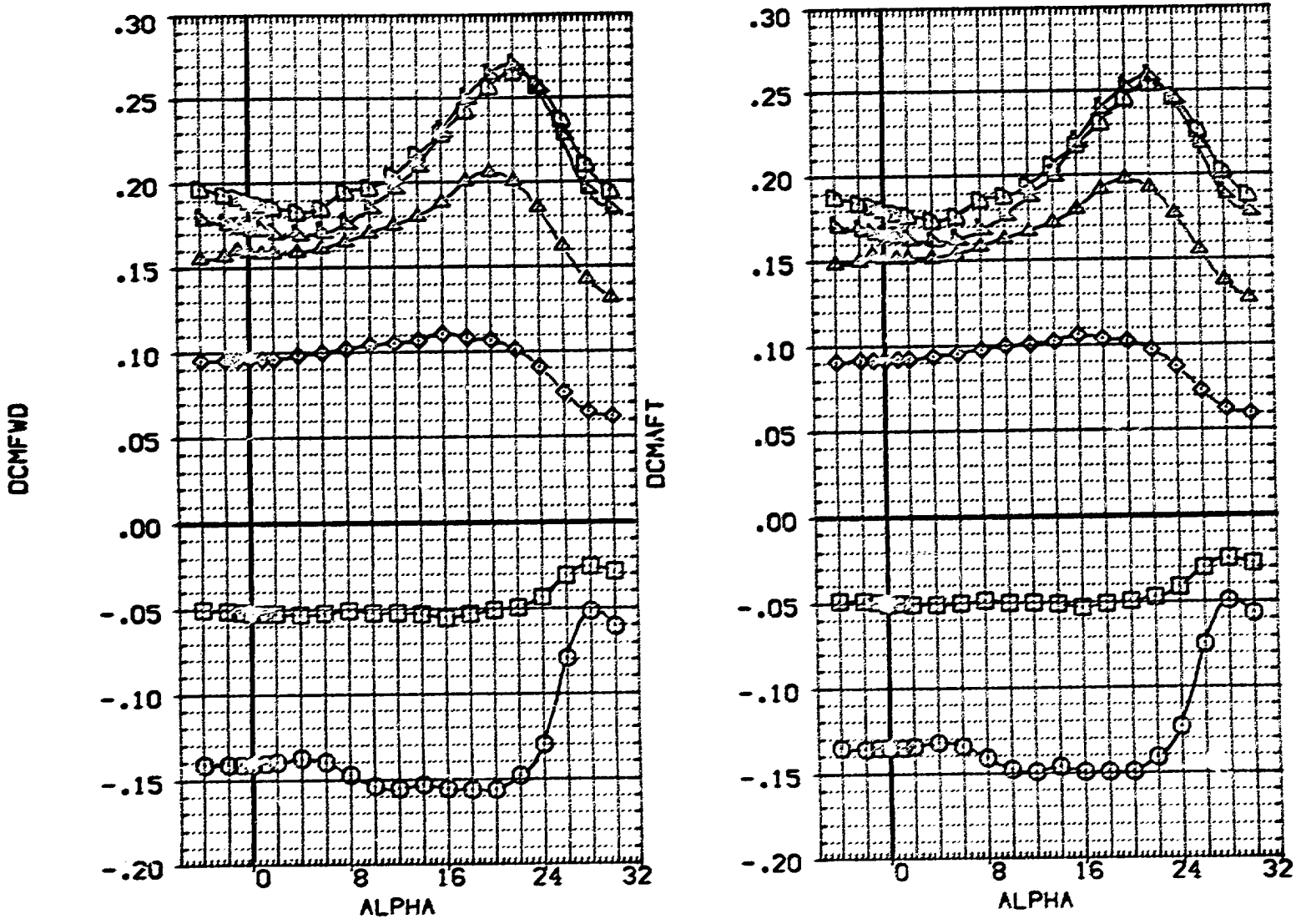


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

(A)MACH = .21

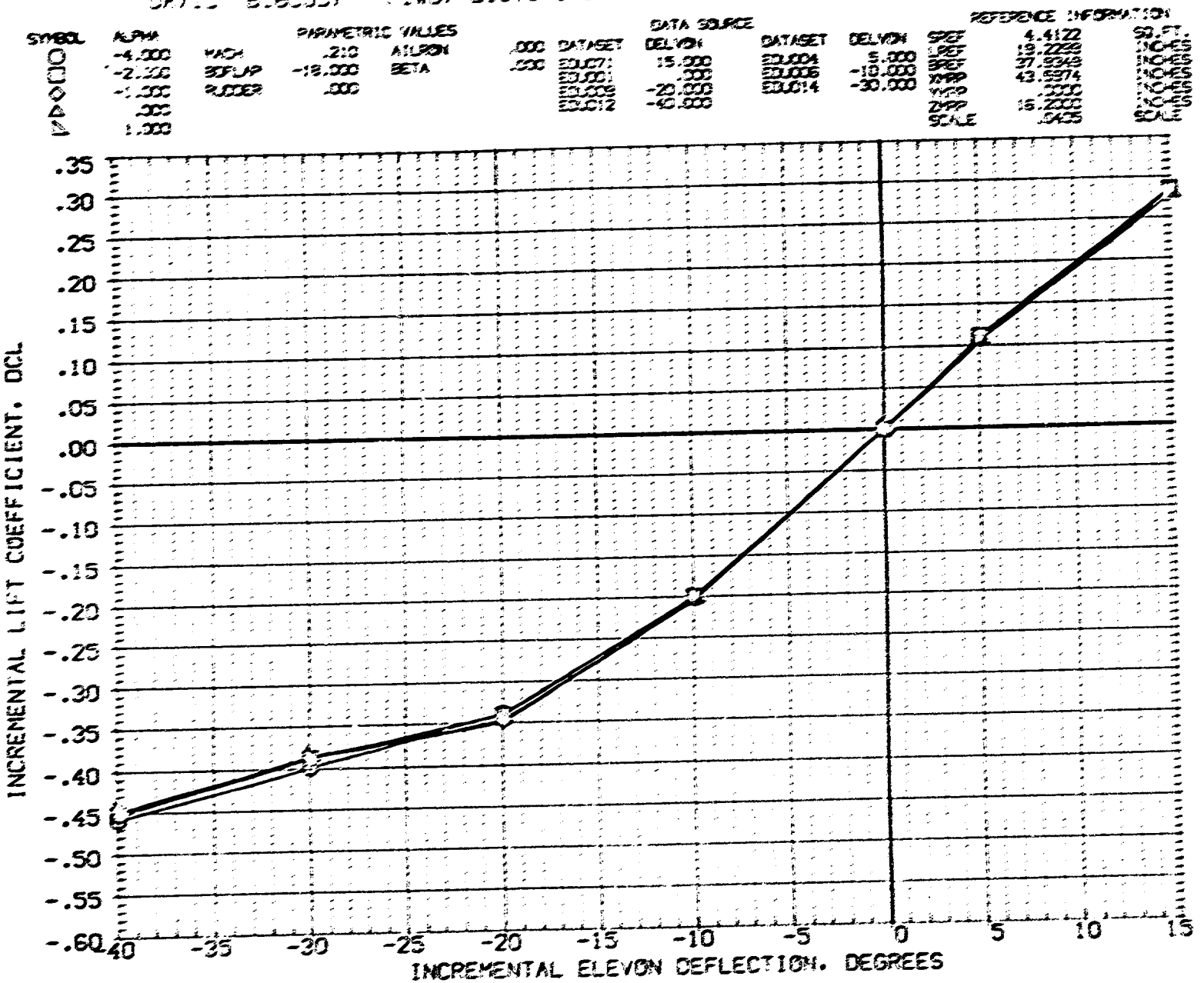


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

INCREMENTAL LIFT COEFFICIENT, ΔCL
INCREMENTAL ELEVON DEFLECTION, DEGREES
.35
.30
.25
.20
.15
.10
.05
0
-.05
-.10
-.15
-.20
-.25
-.30
-.35
-.40
-.45
-.50
-.55
-.60
-10
-15
-20
-25
-30
-35
-40
-45
-50
-55
-60

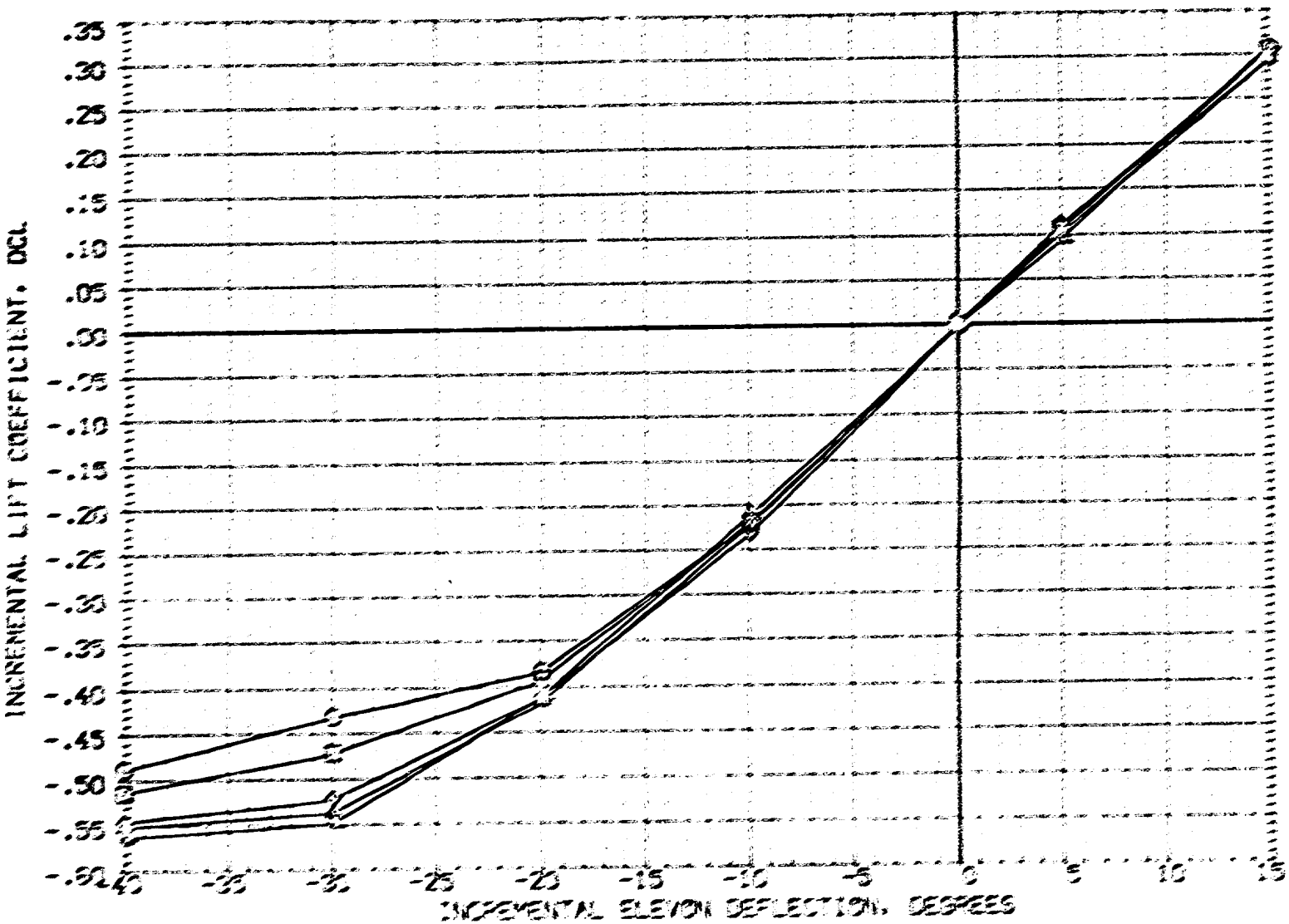


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NC MODELS

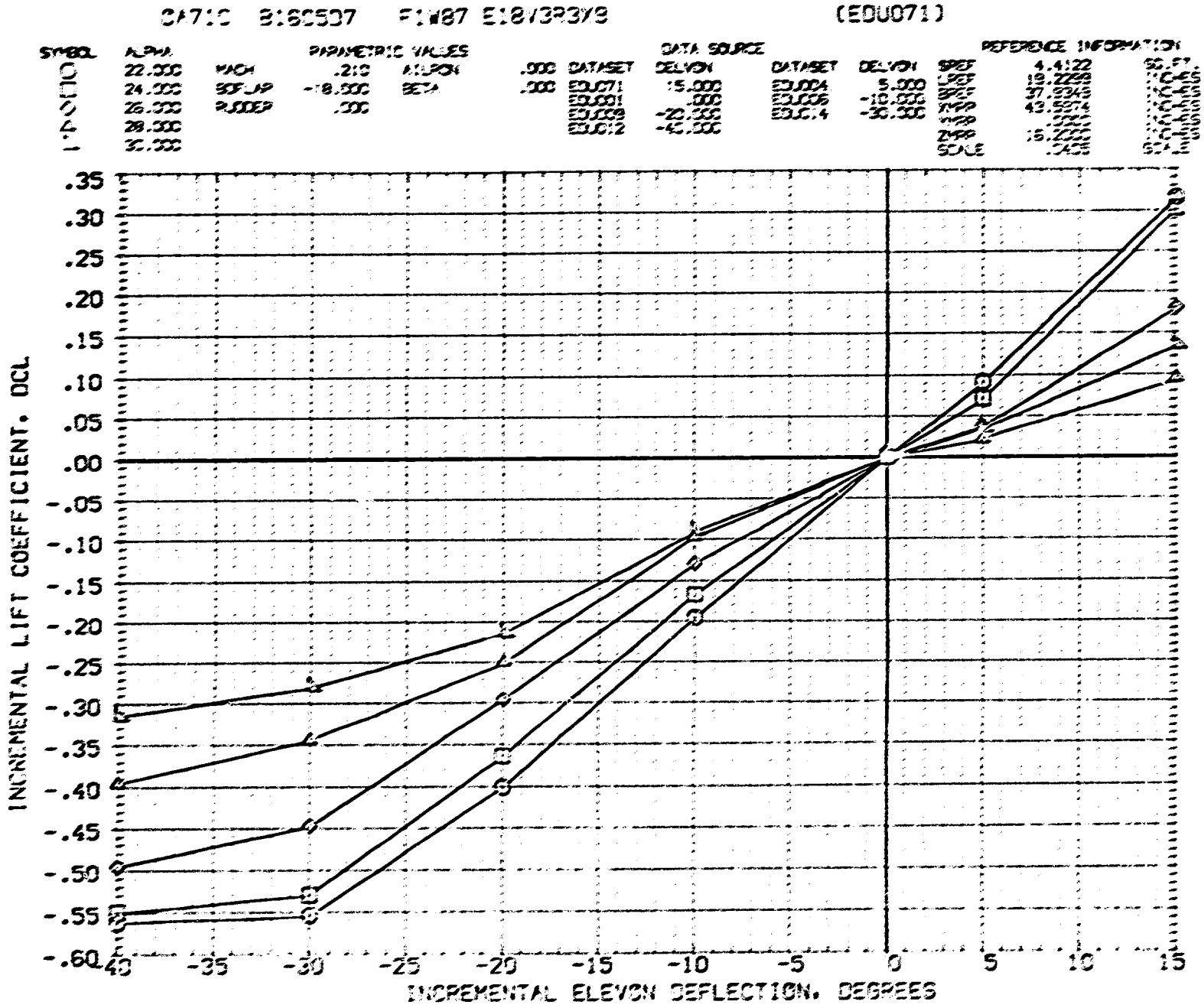


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

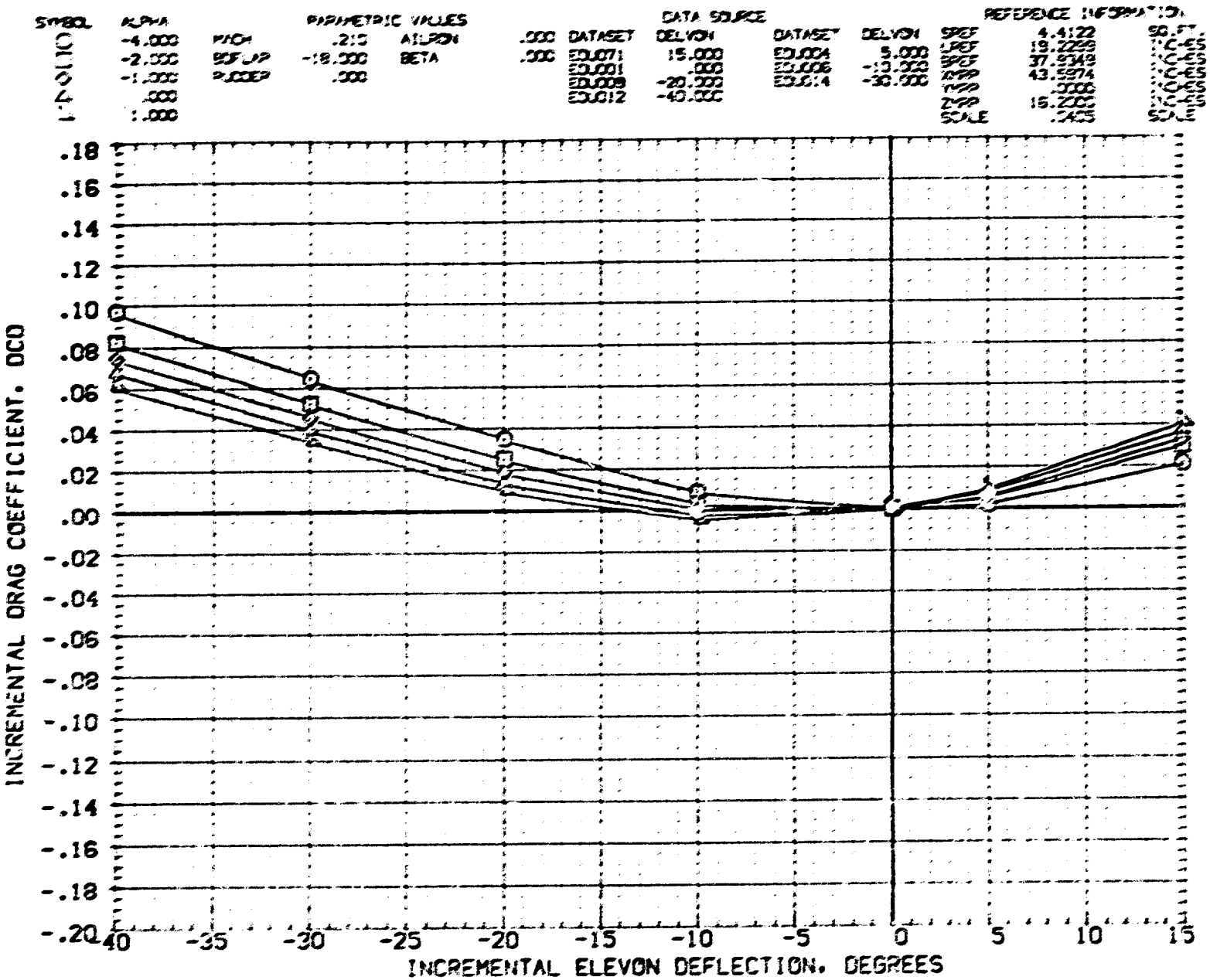


FIG 5 - INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

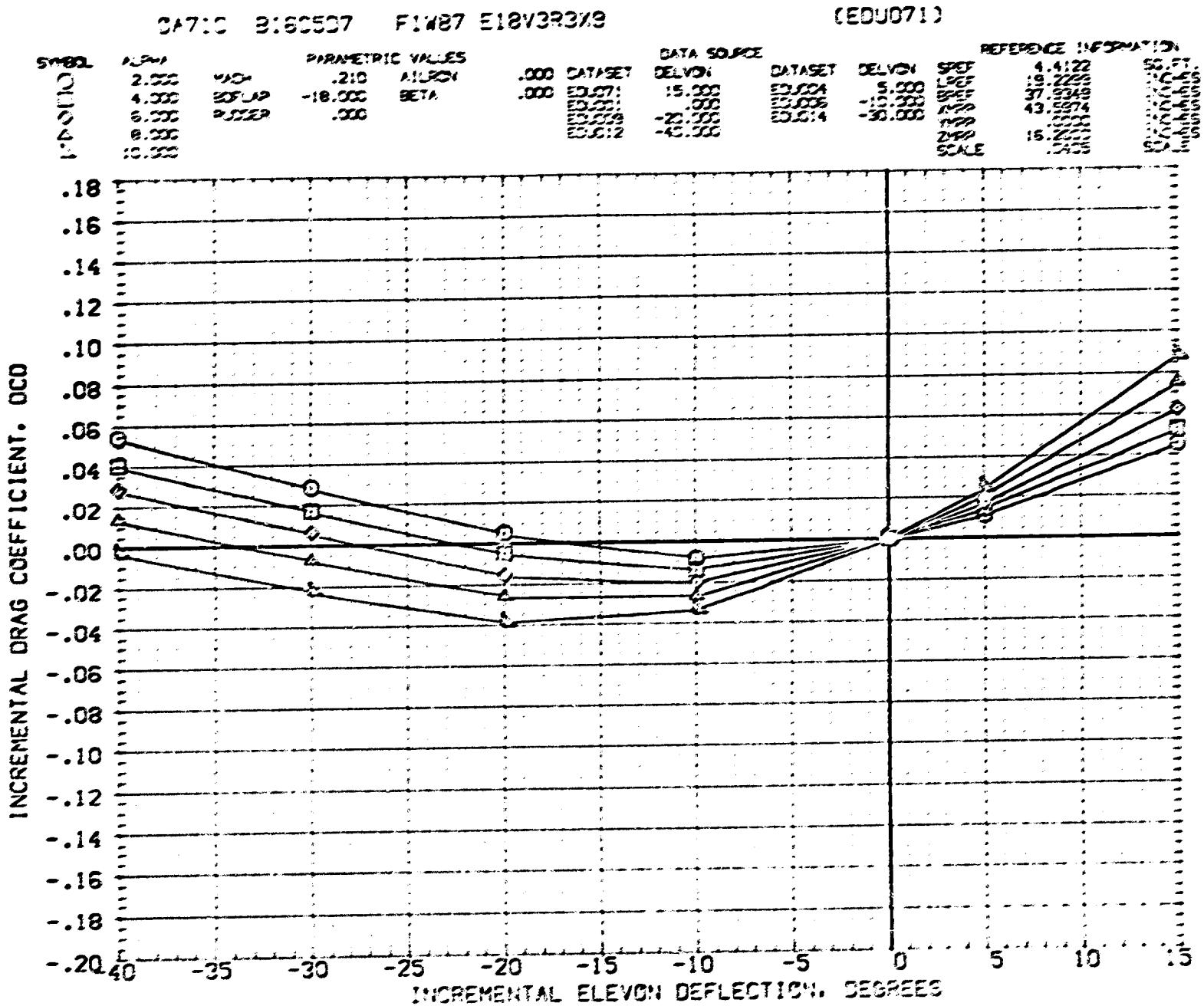


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

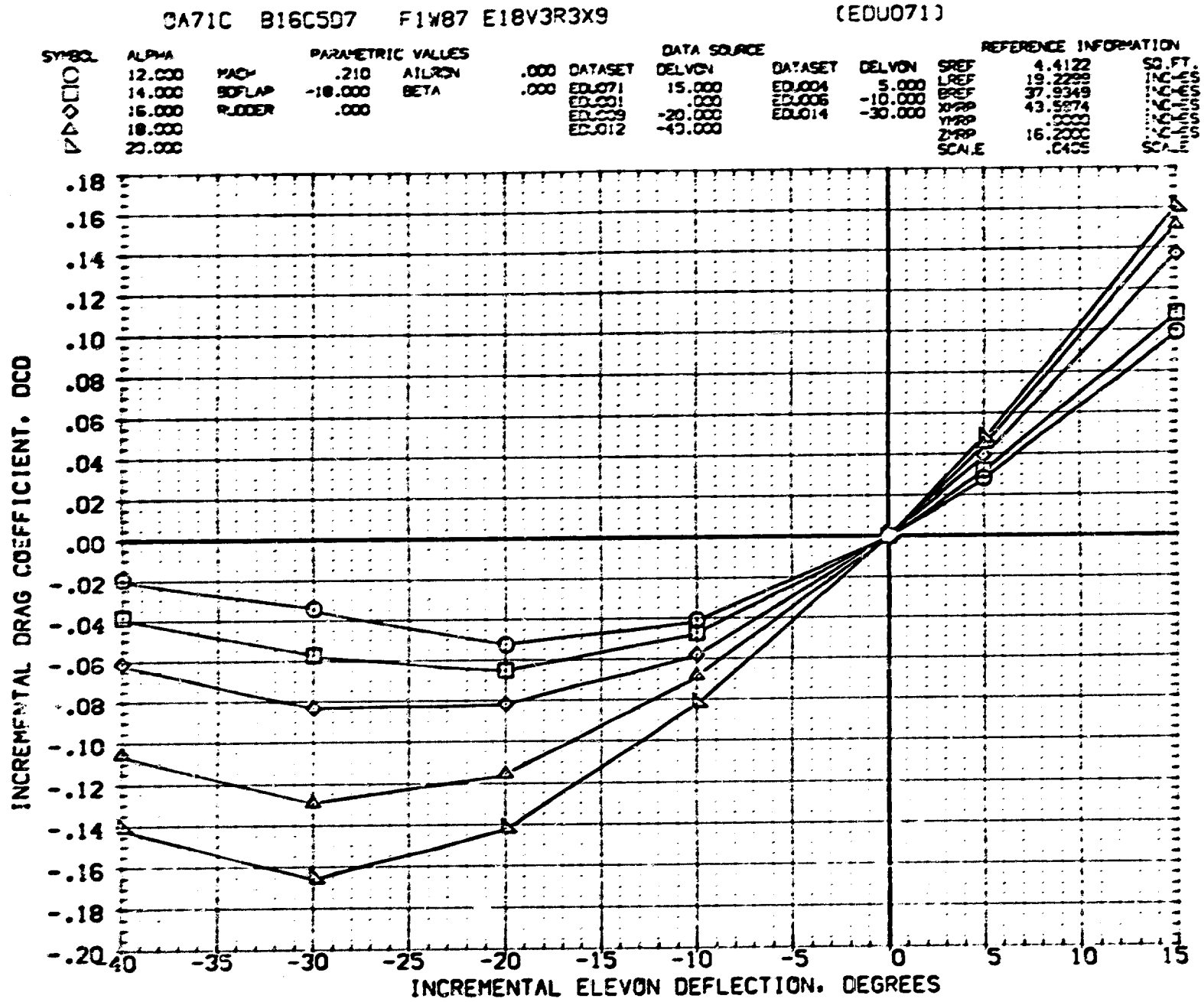


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

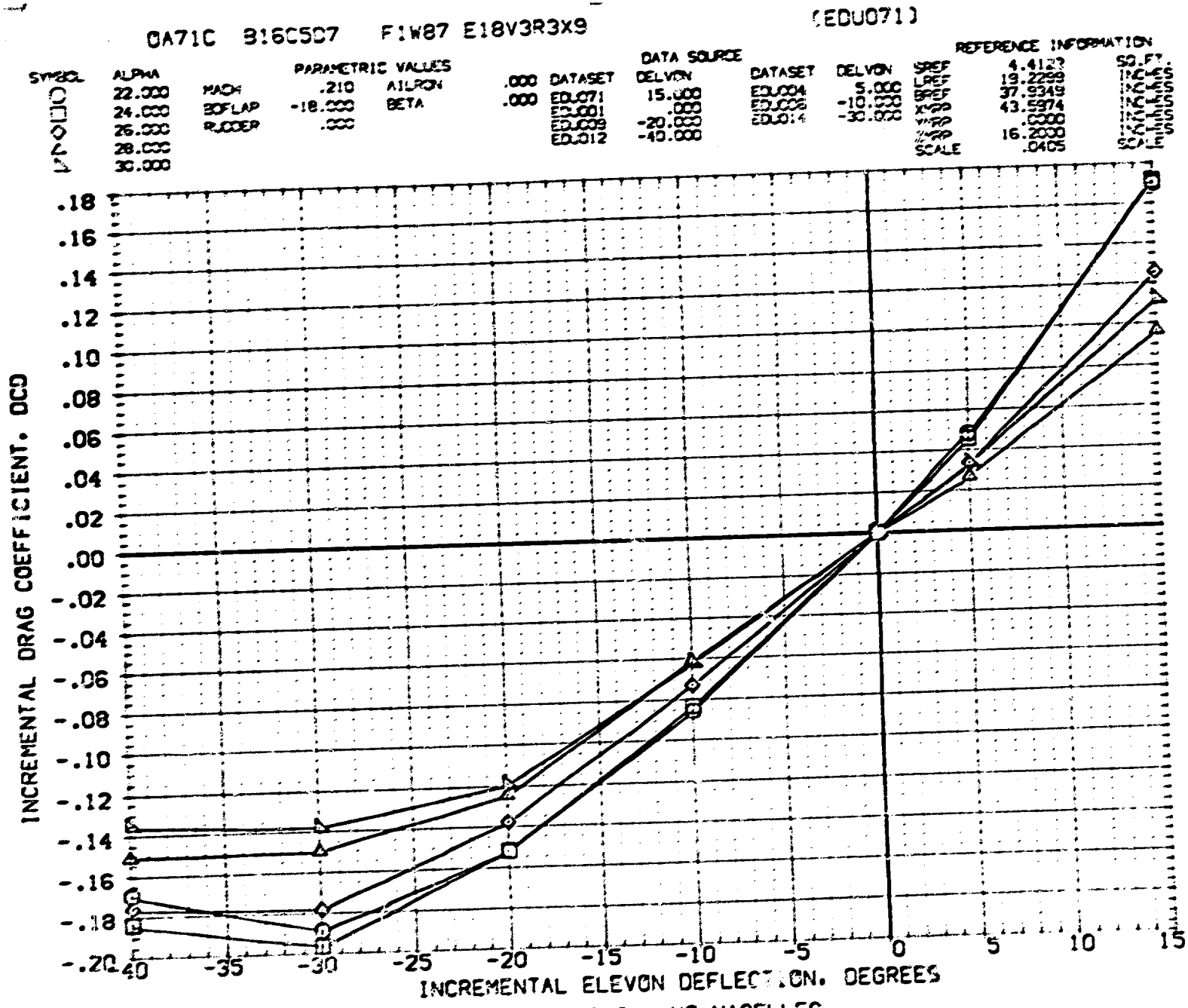


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

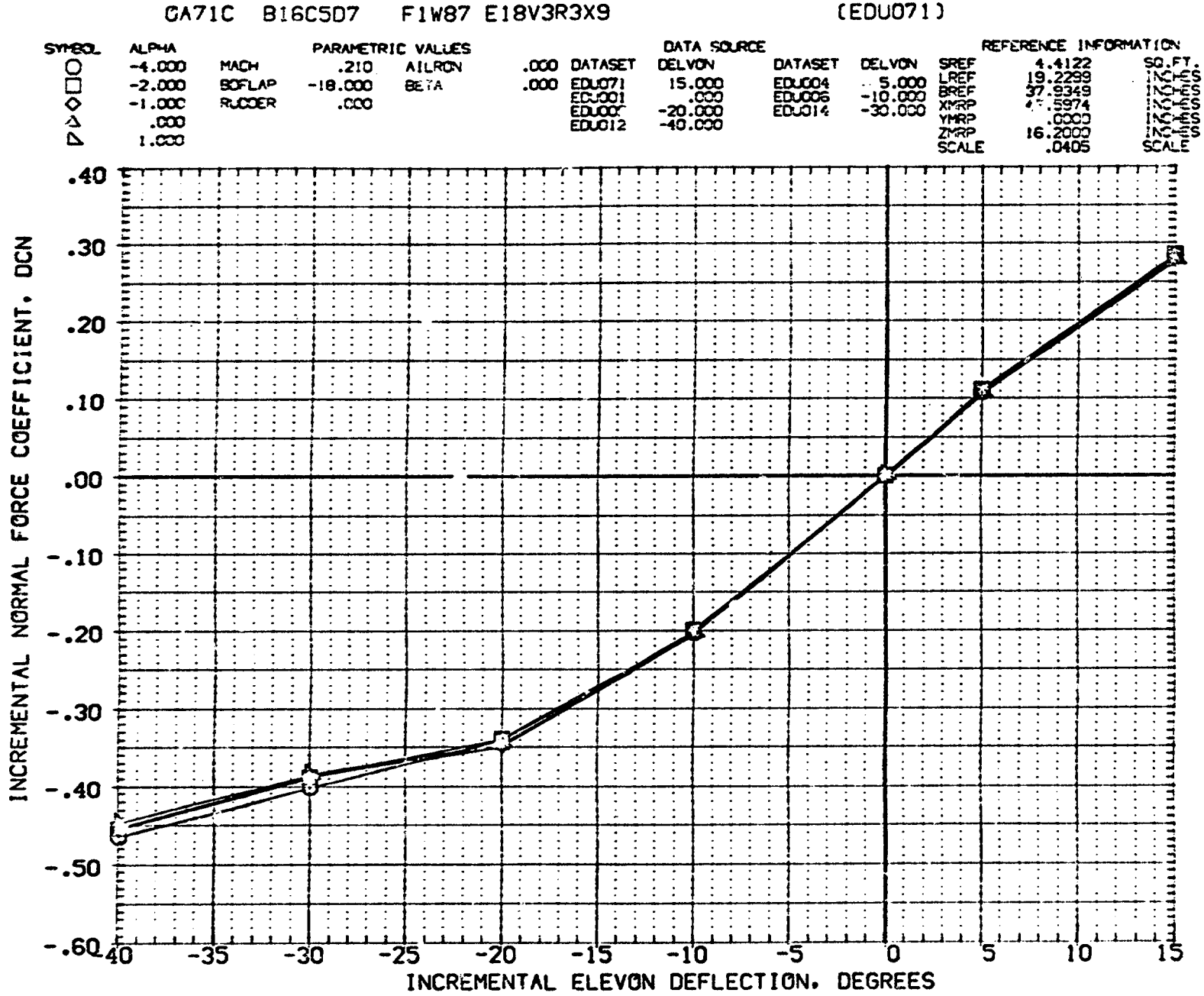


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

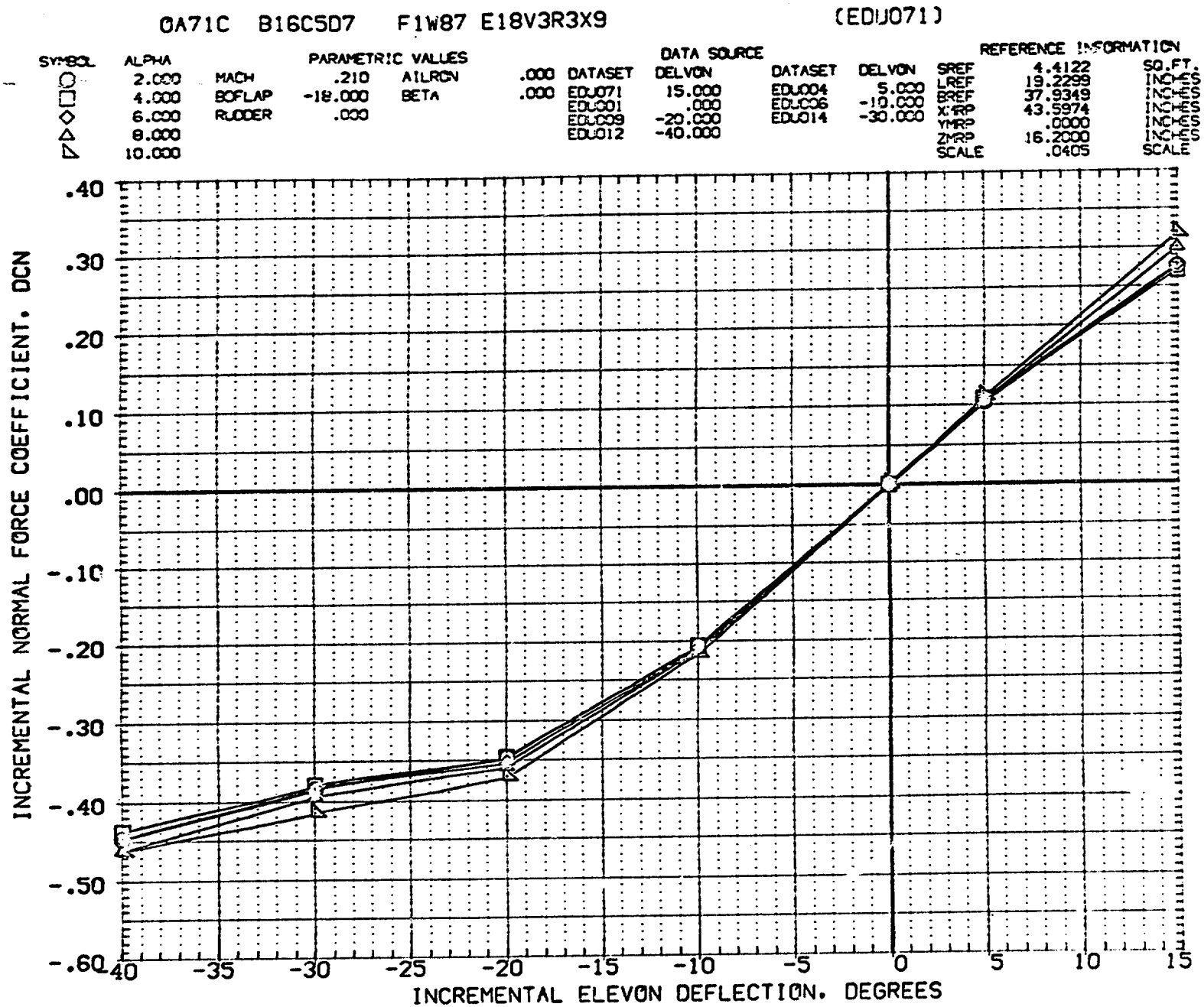


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

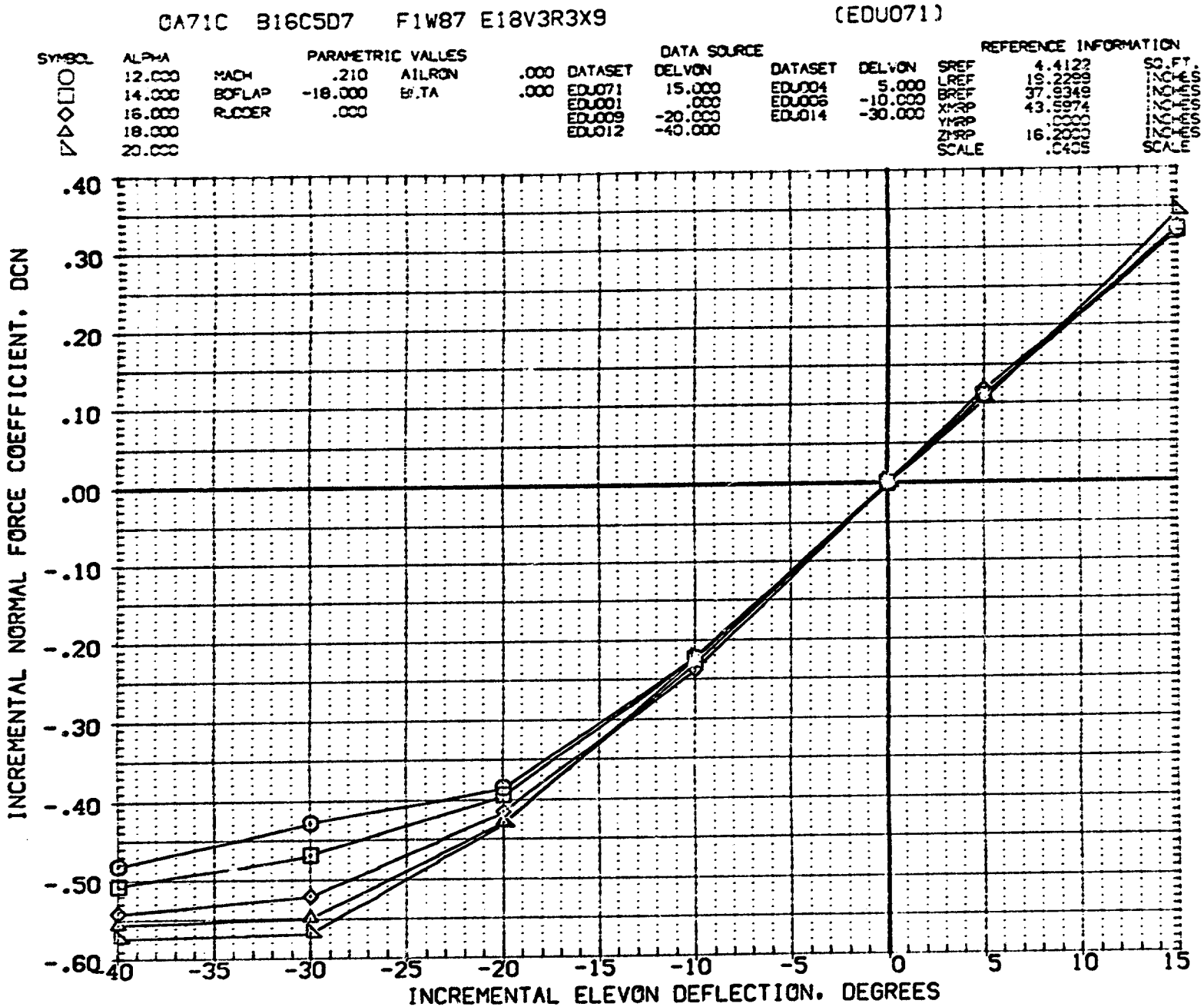


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

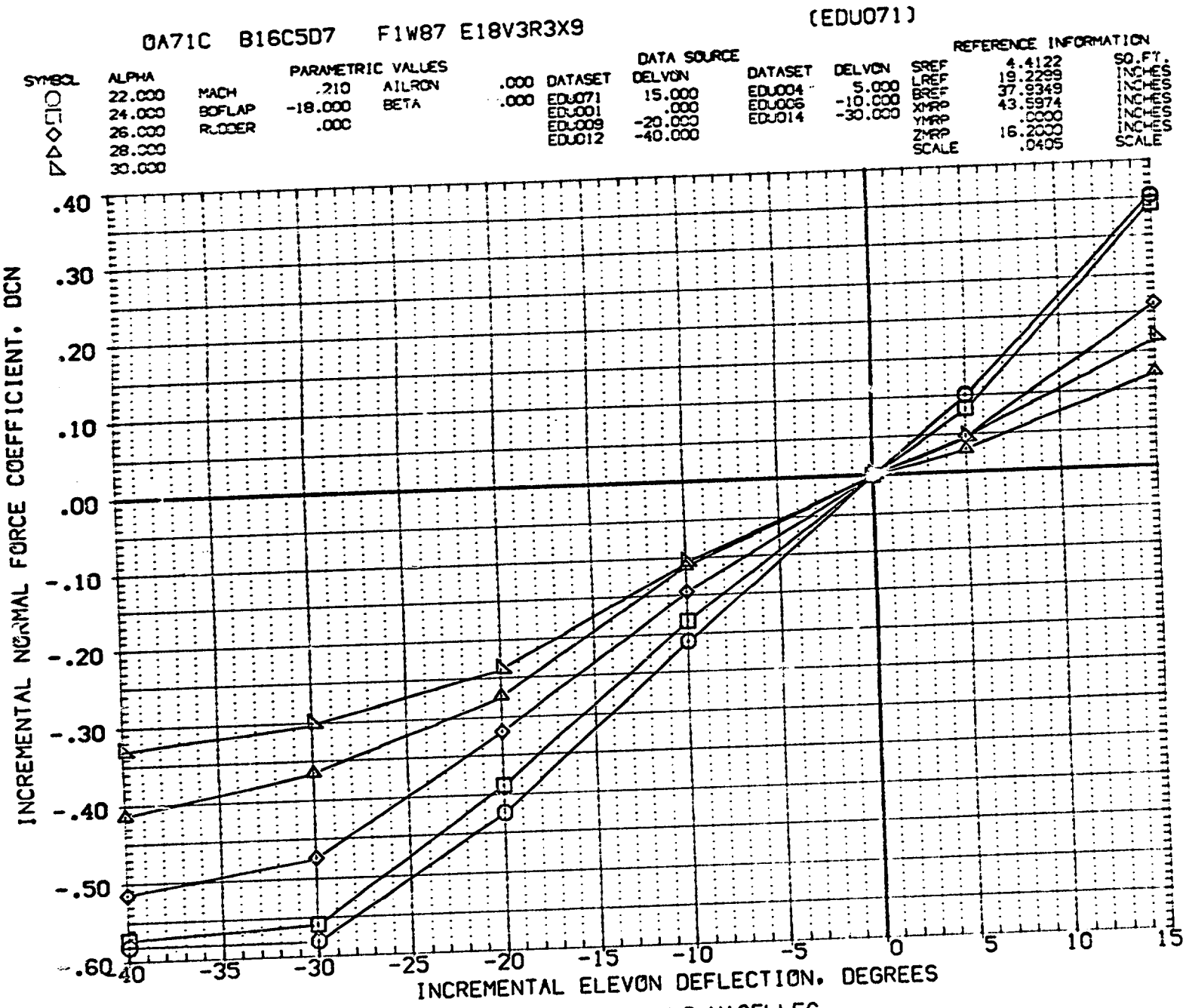


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

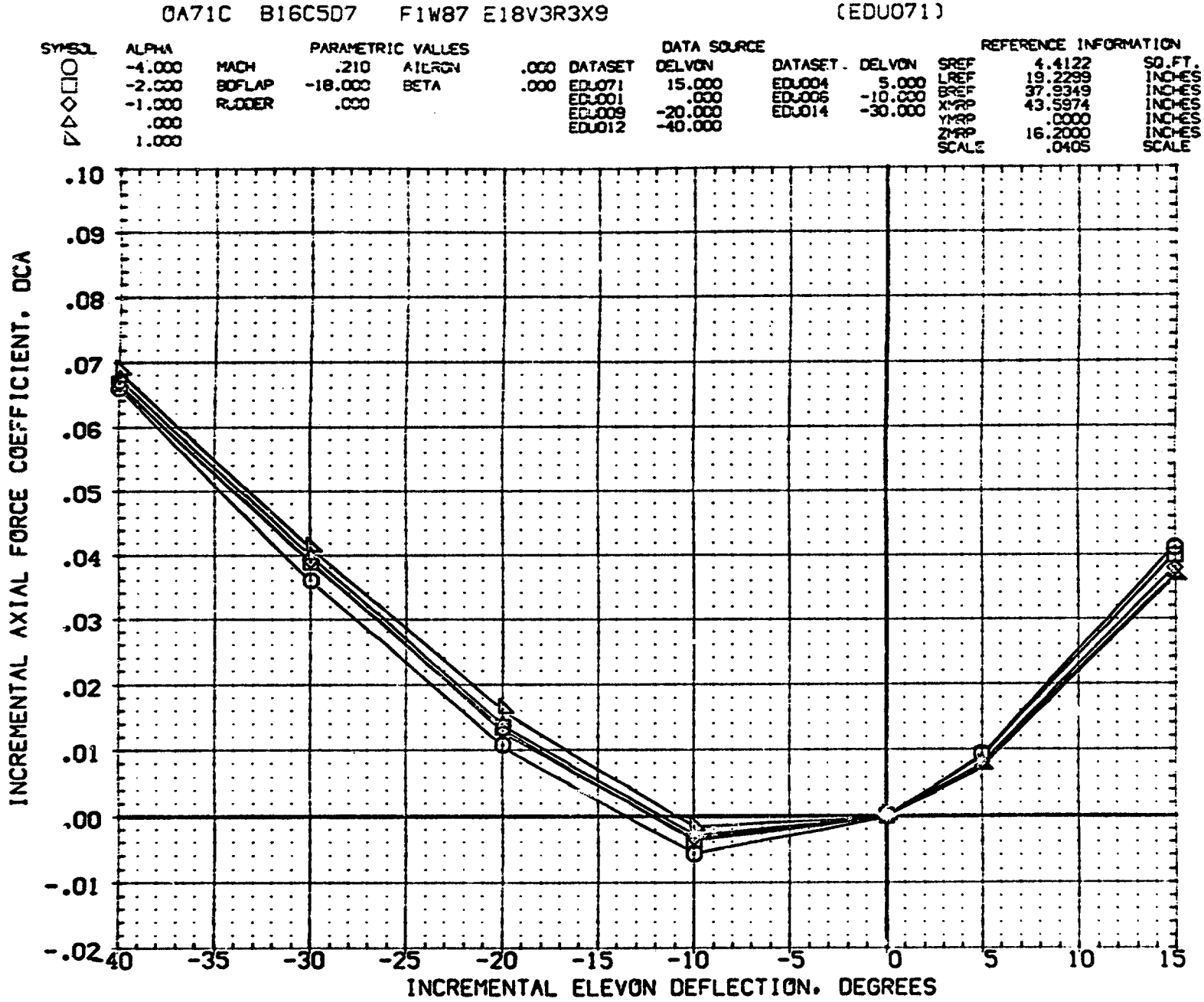


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

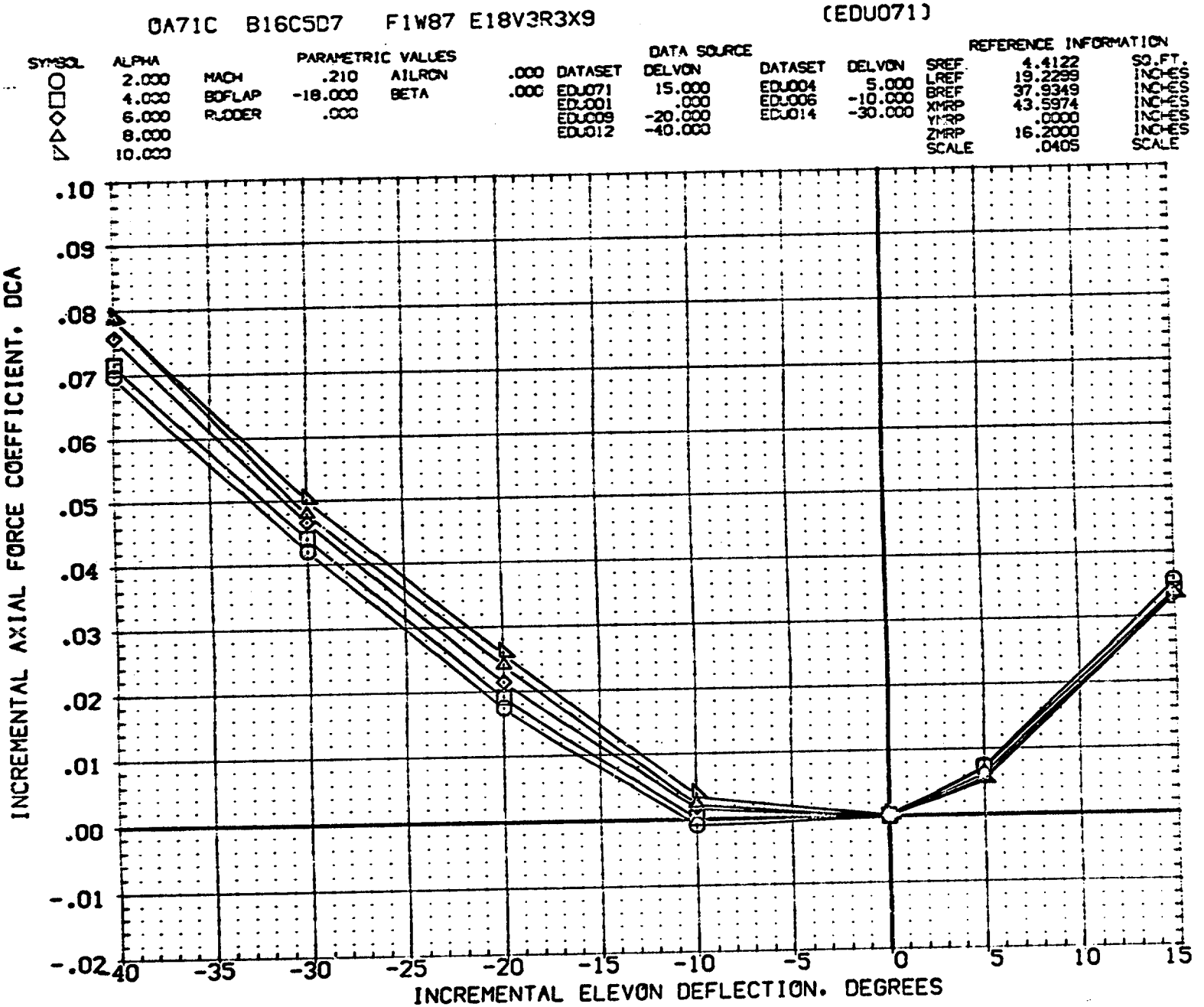


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

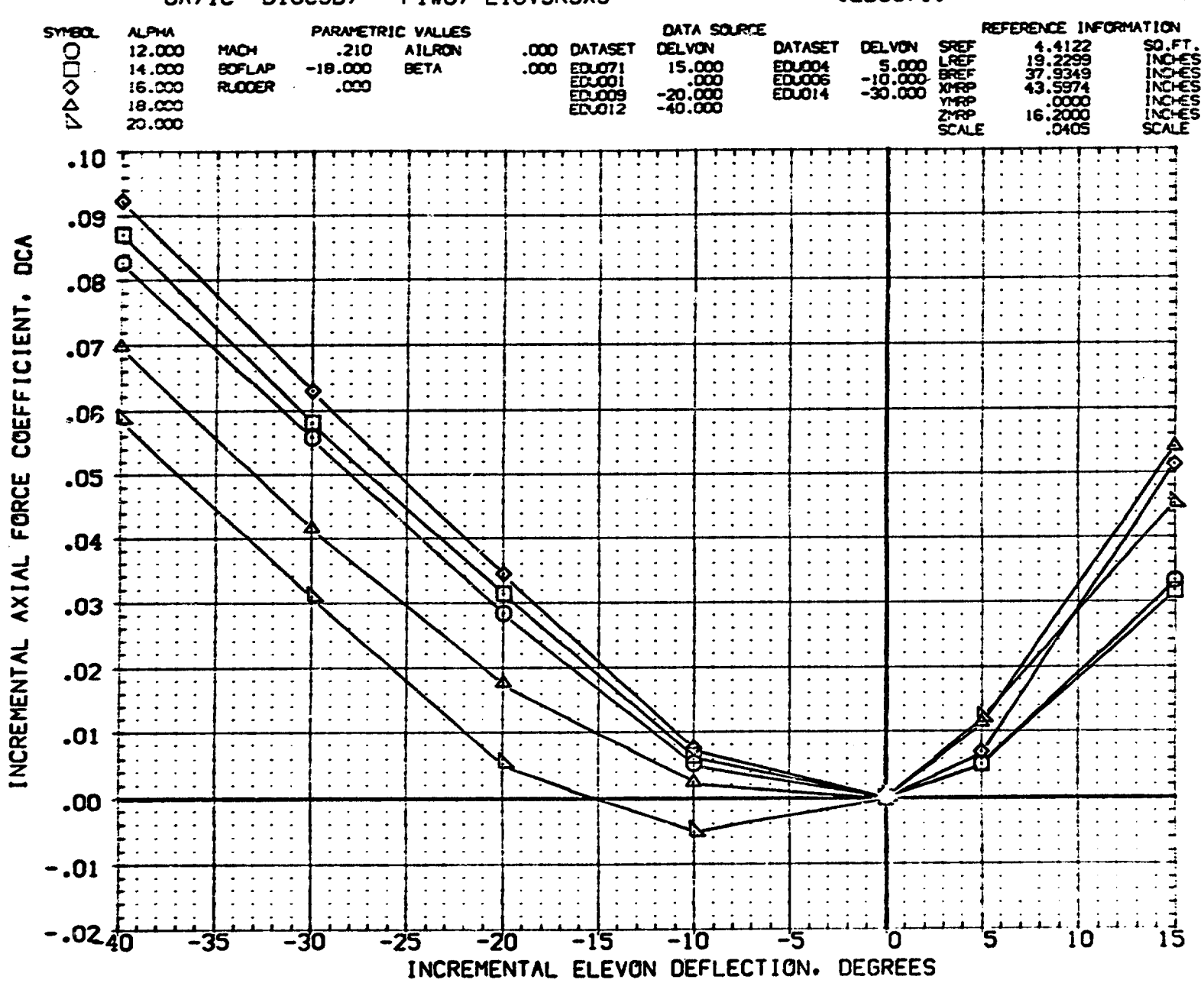


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

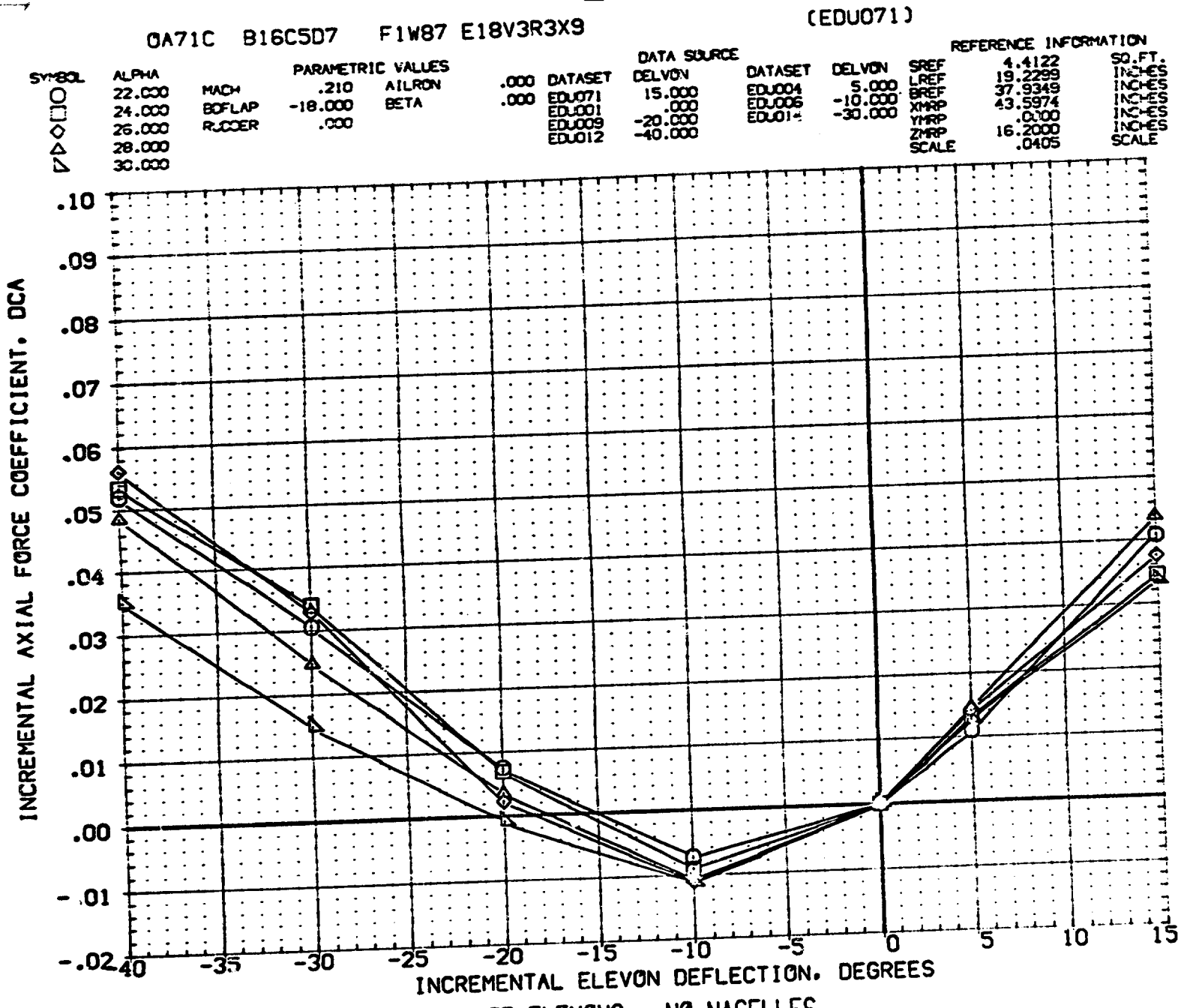


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

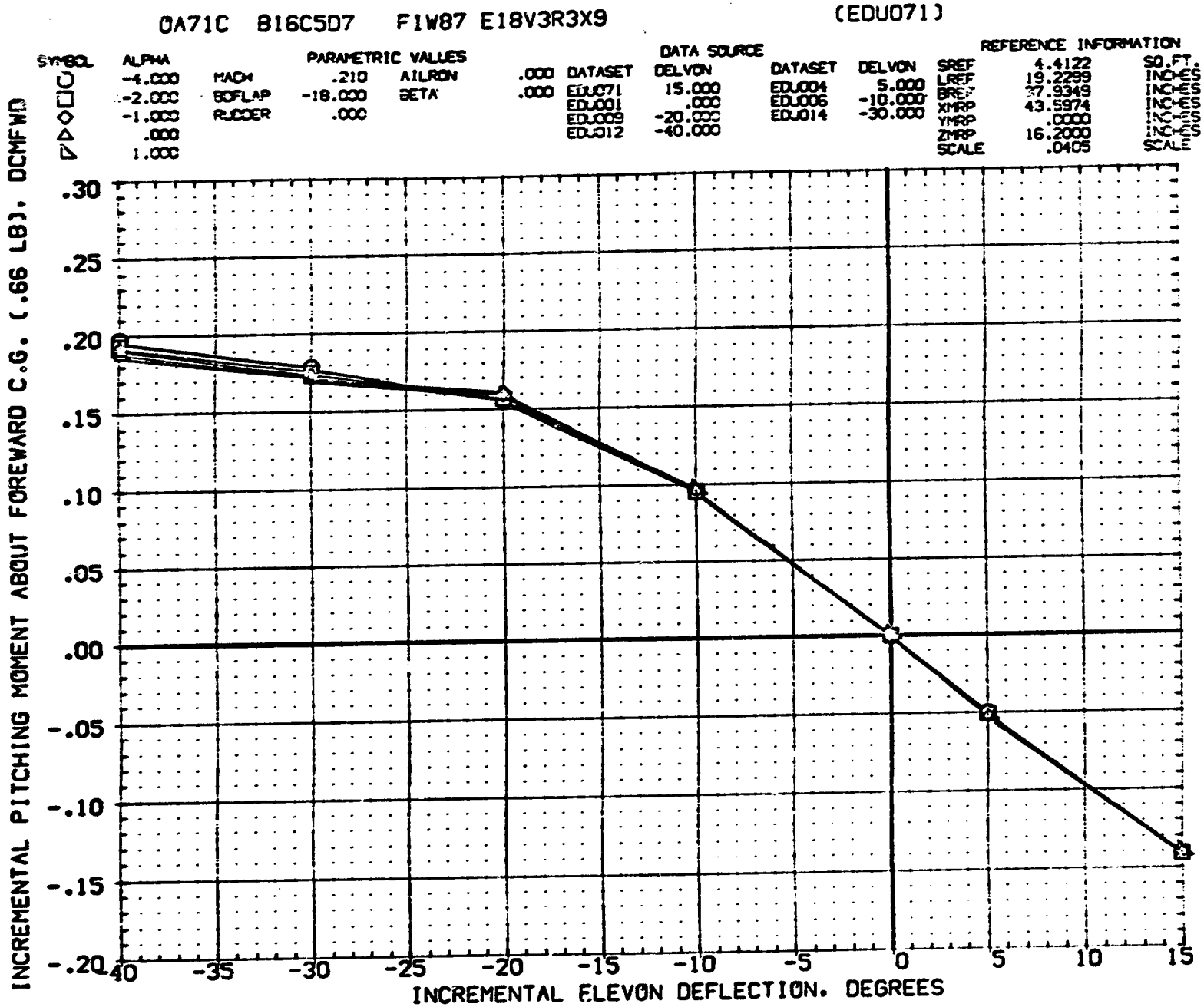


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

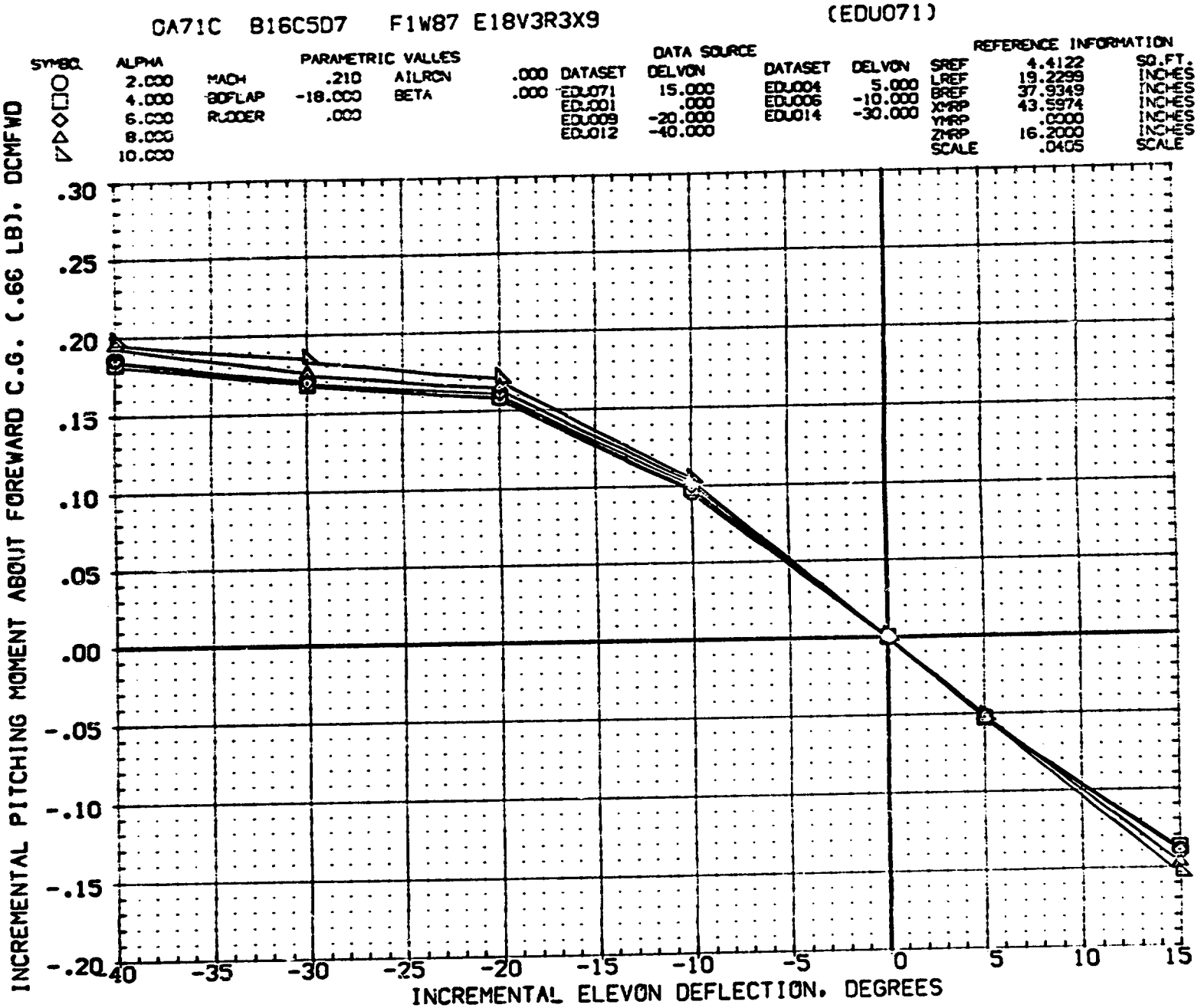


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

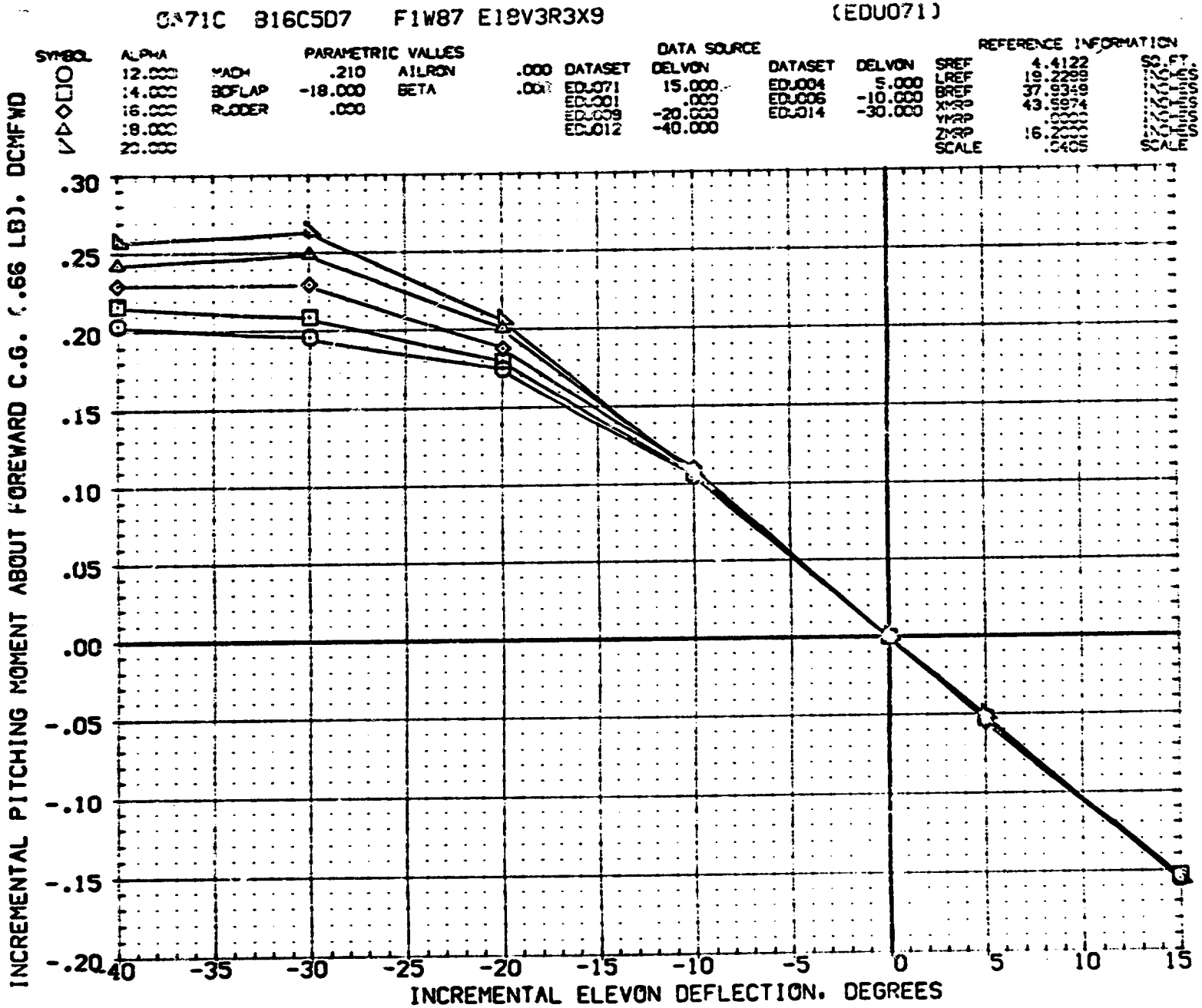


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

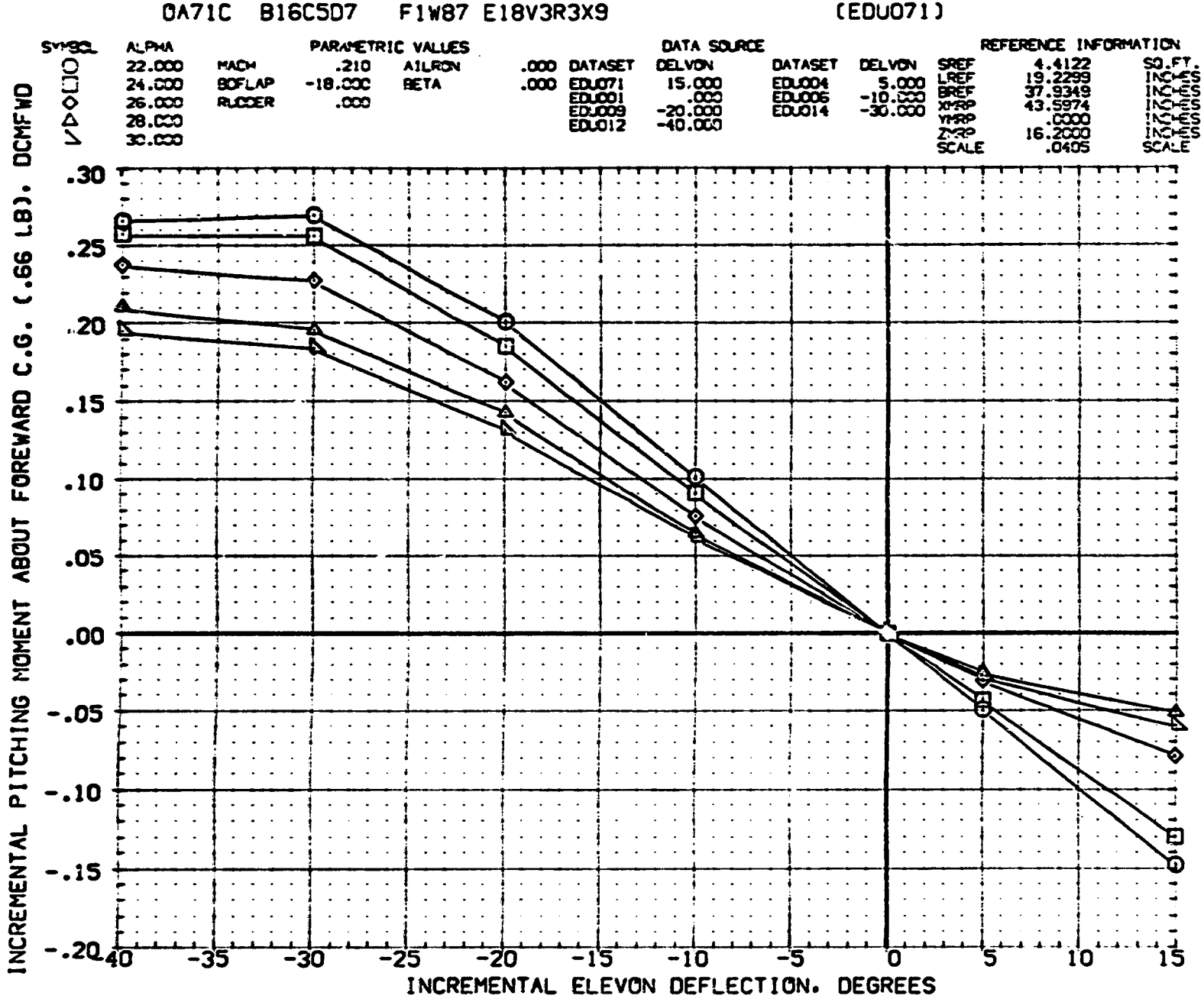


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

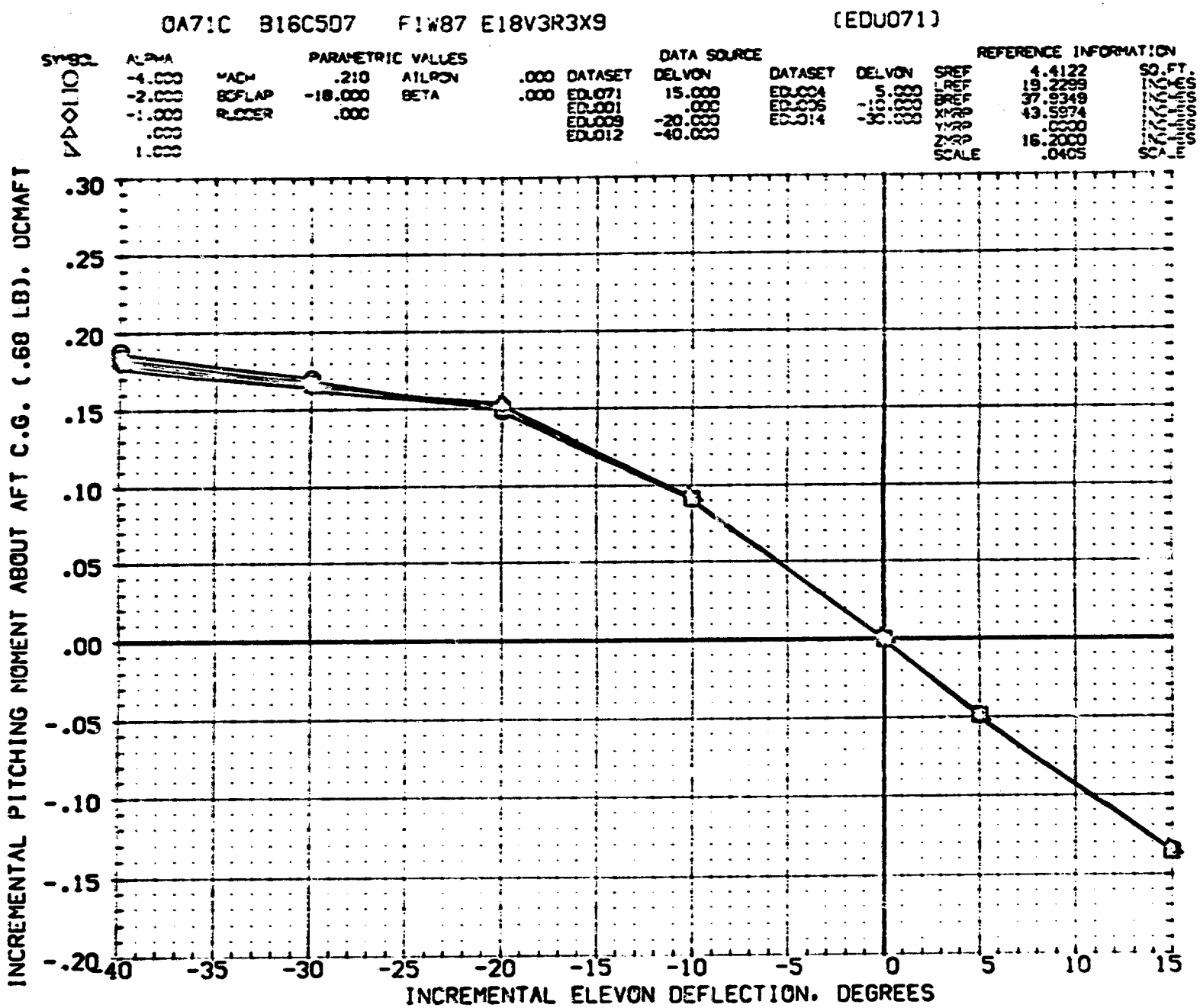


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

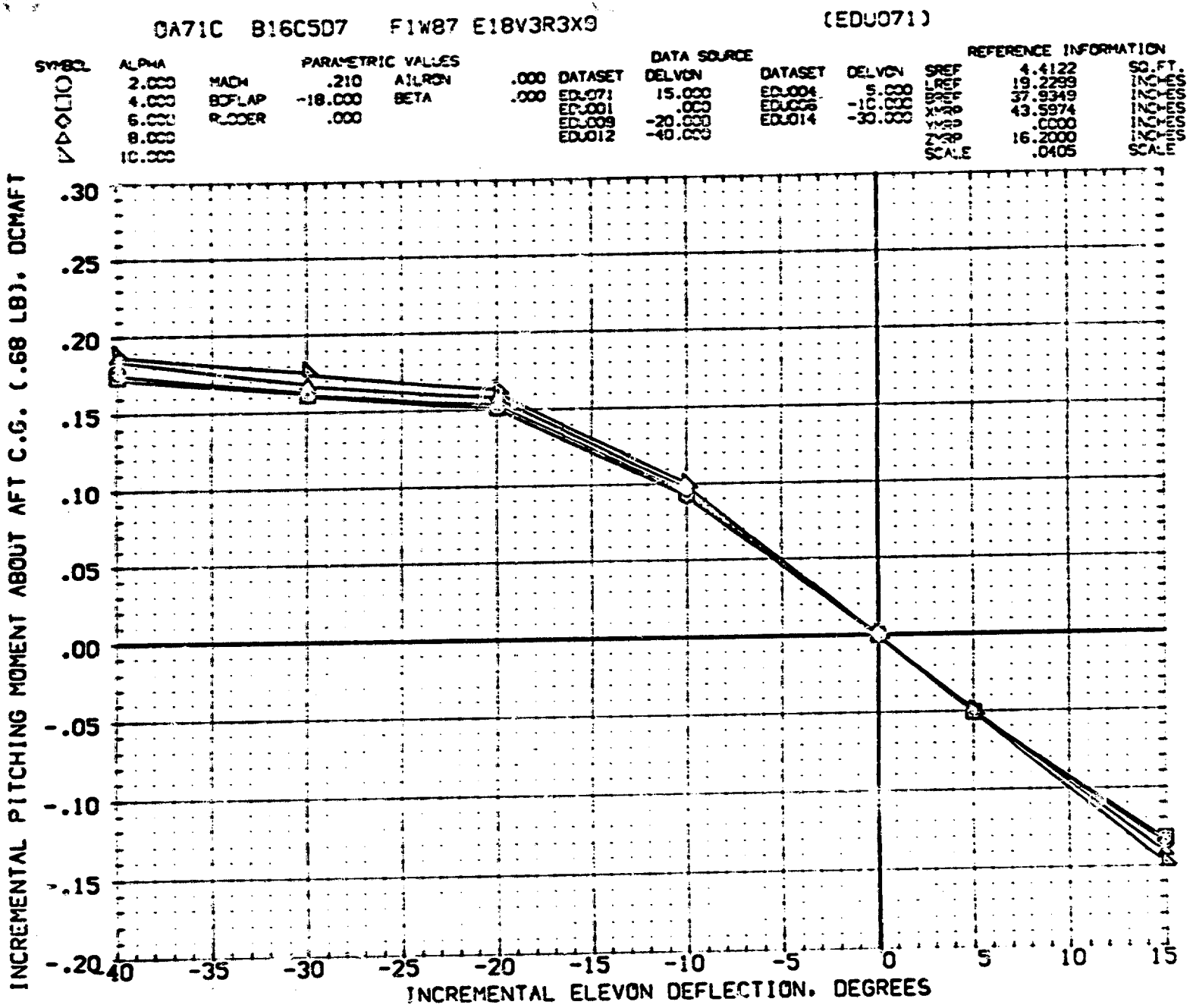


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

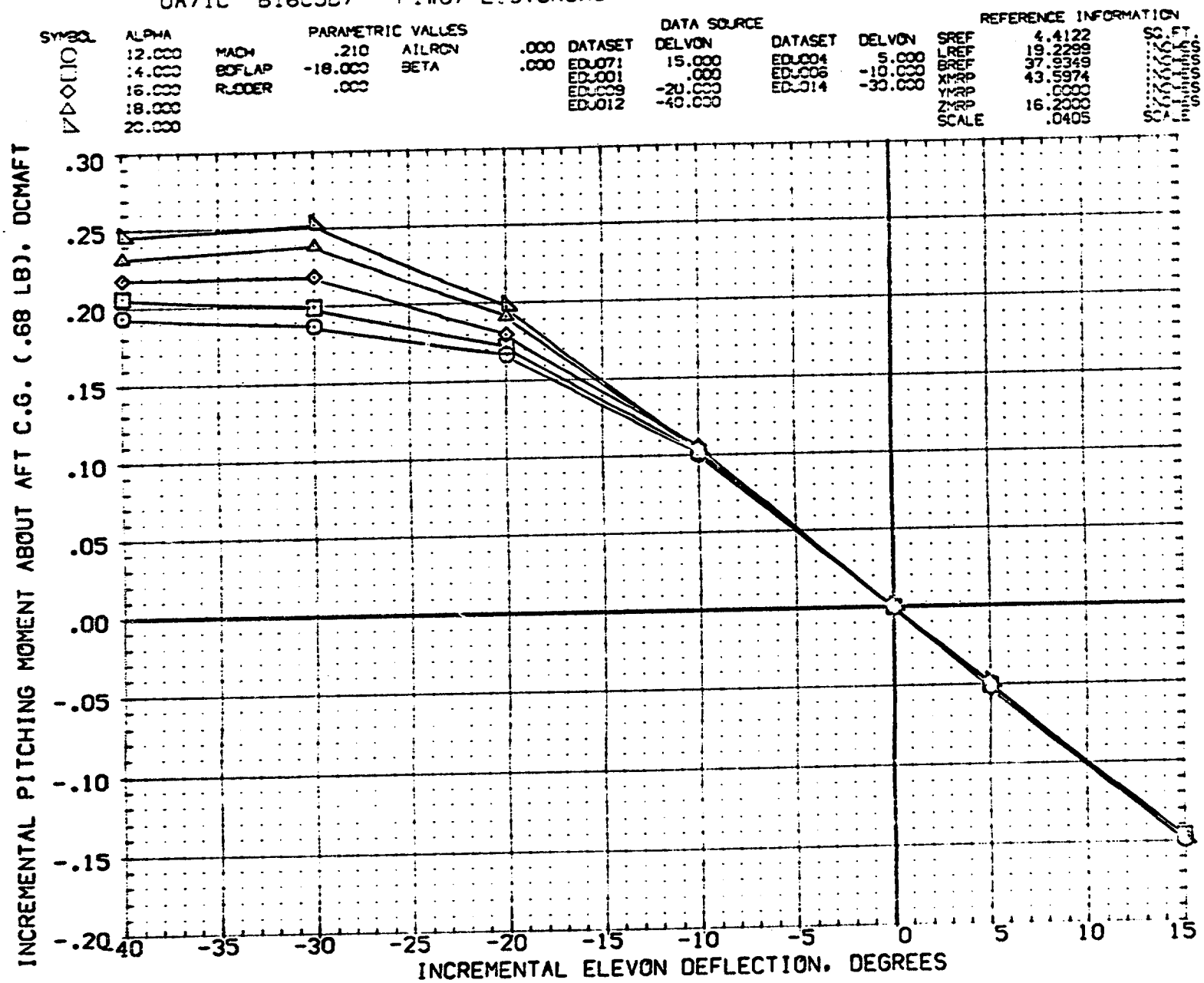


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

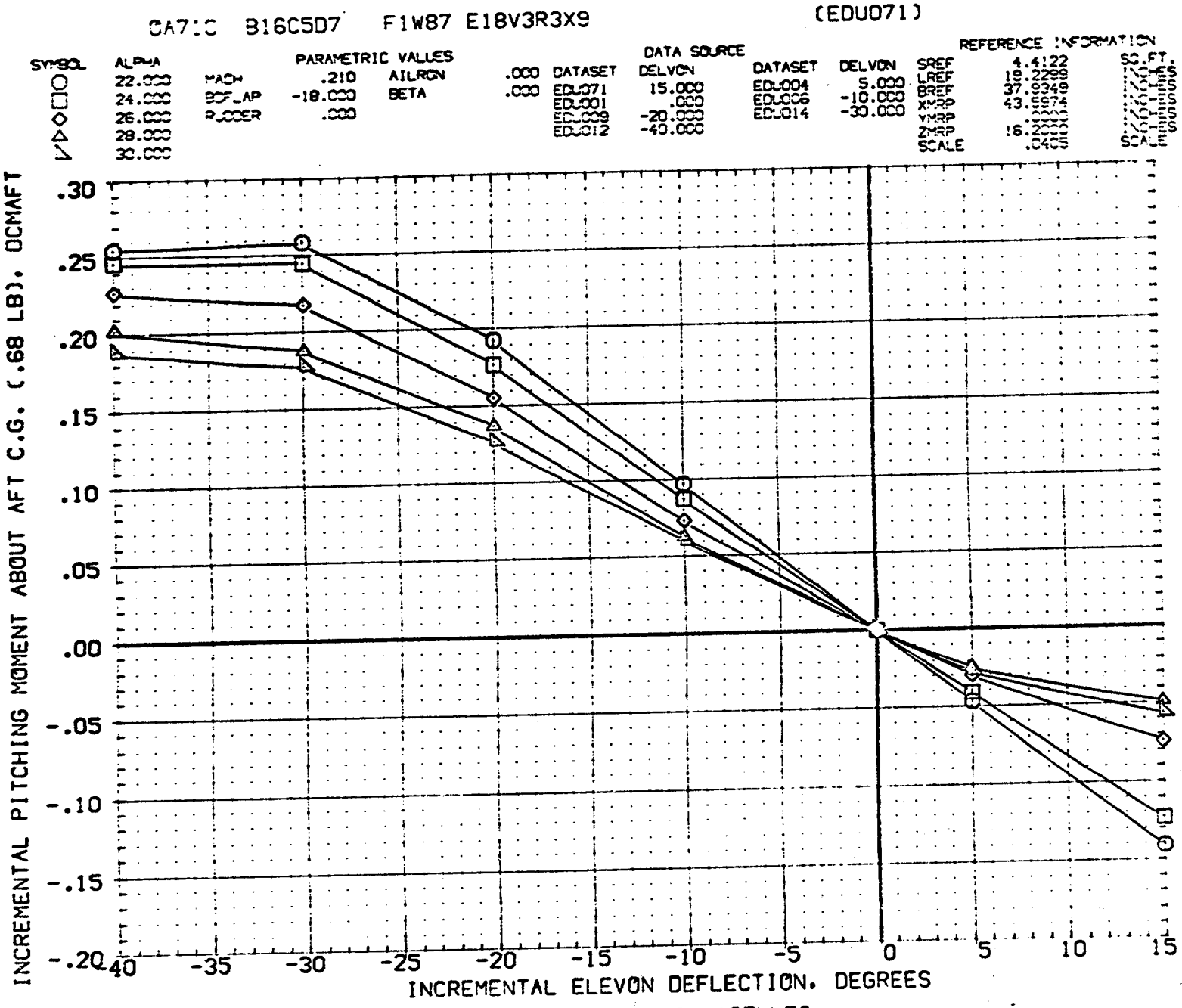


FIG 5 INCREMENTAL EFFECT OF ELEVONS - NO NACELLES

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(ADU040)	○	CA71C B16CS07J34F1V87 E18V3R3X10
(ADU037)	□	CA71C B16CS07J34F1V87 E18V3R3X10
(ADU041)	◇	CA71C B16CS07J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

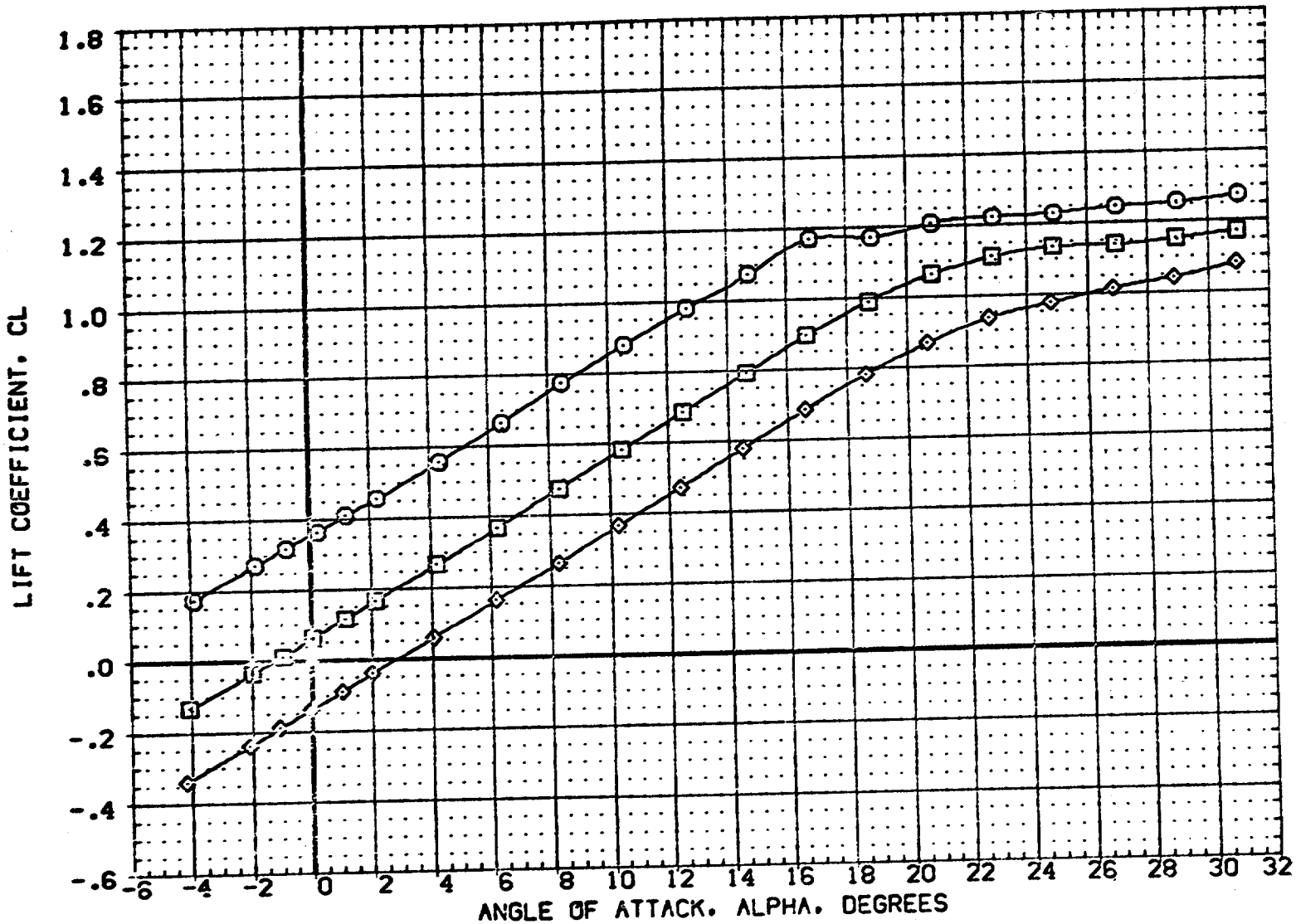


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADJC42)	○	CA71C B16CSD7J34F1V87 E18V3R3X10	15.000	.000	7.000	5.000
(ADJC37)	□	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADJC41)	◇	CA71C B16CSD7J34F1V87 E18V3R3X10	-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2293	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

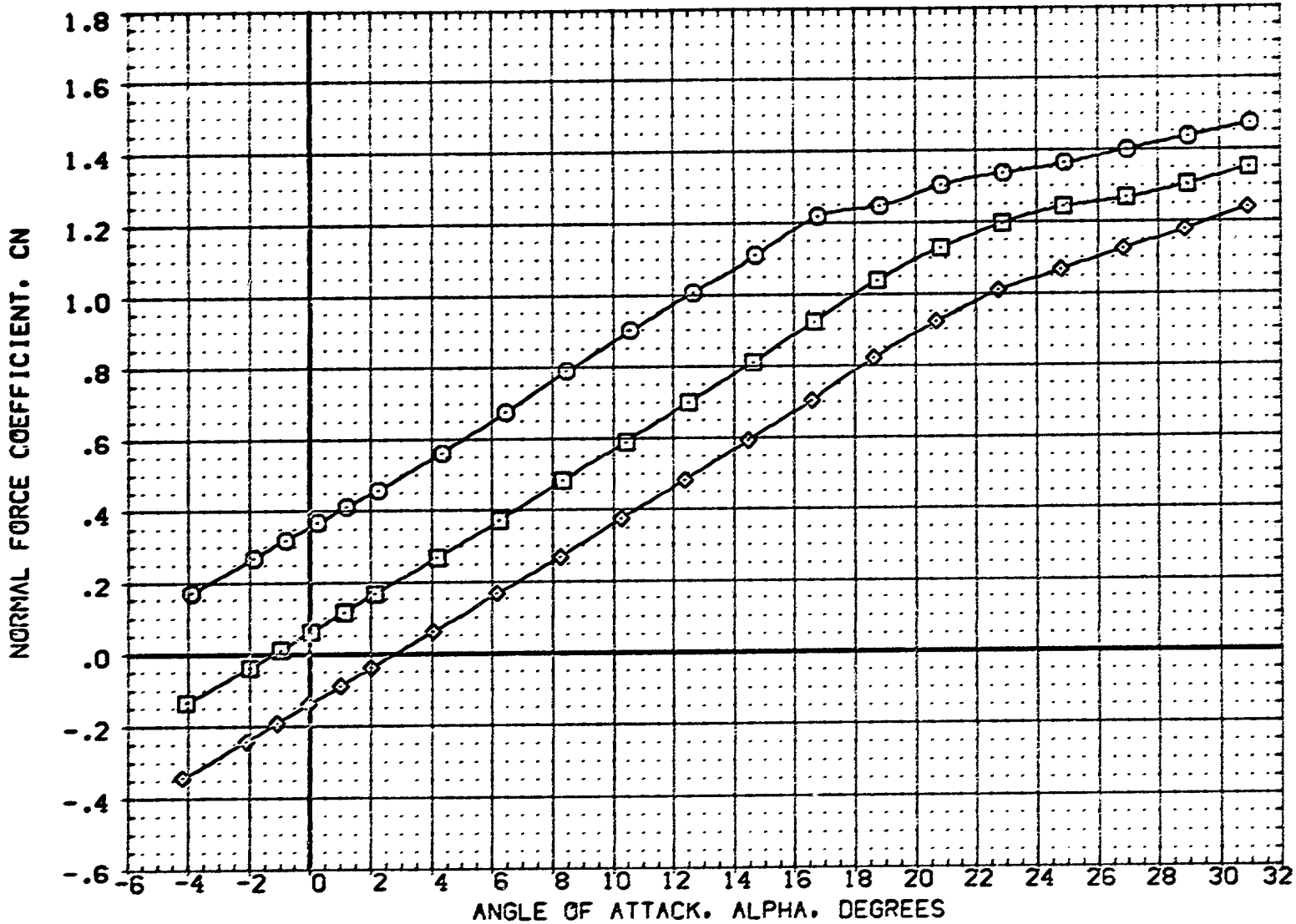


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ADJ040)	CA71C B16CSD7J34F1V87 E18V3R3X10
(ADJ037)	CA71C B16CSD7J34F1V87 E18V3R3X10
(ADJ041)	CA71C B16CSD7J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

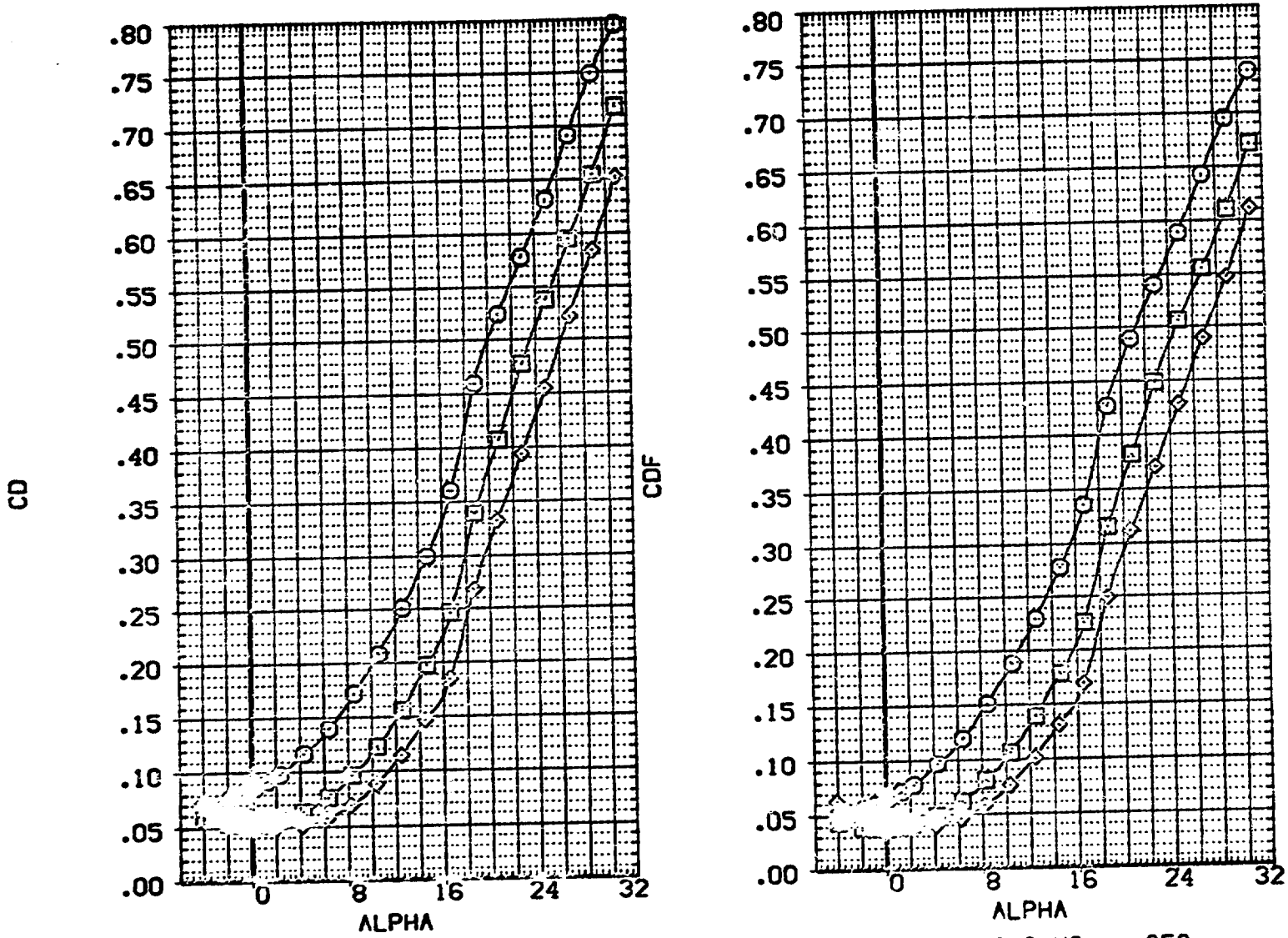


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ADJ040) ○	CA71C B16C507J34F1V87 E18V3R3X10
(ADJ037) □	CA71C B16C507J34F1V37 E18V3R3X10
(ADJ041) ◇	CA71C B16C507J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2239	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

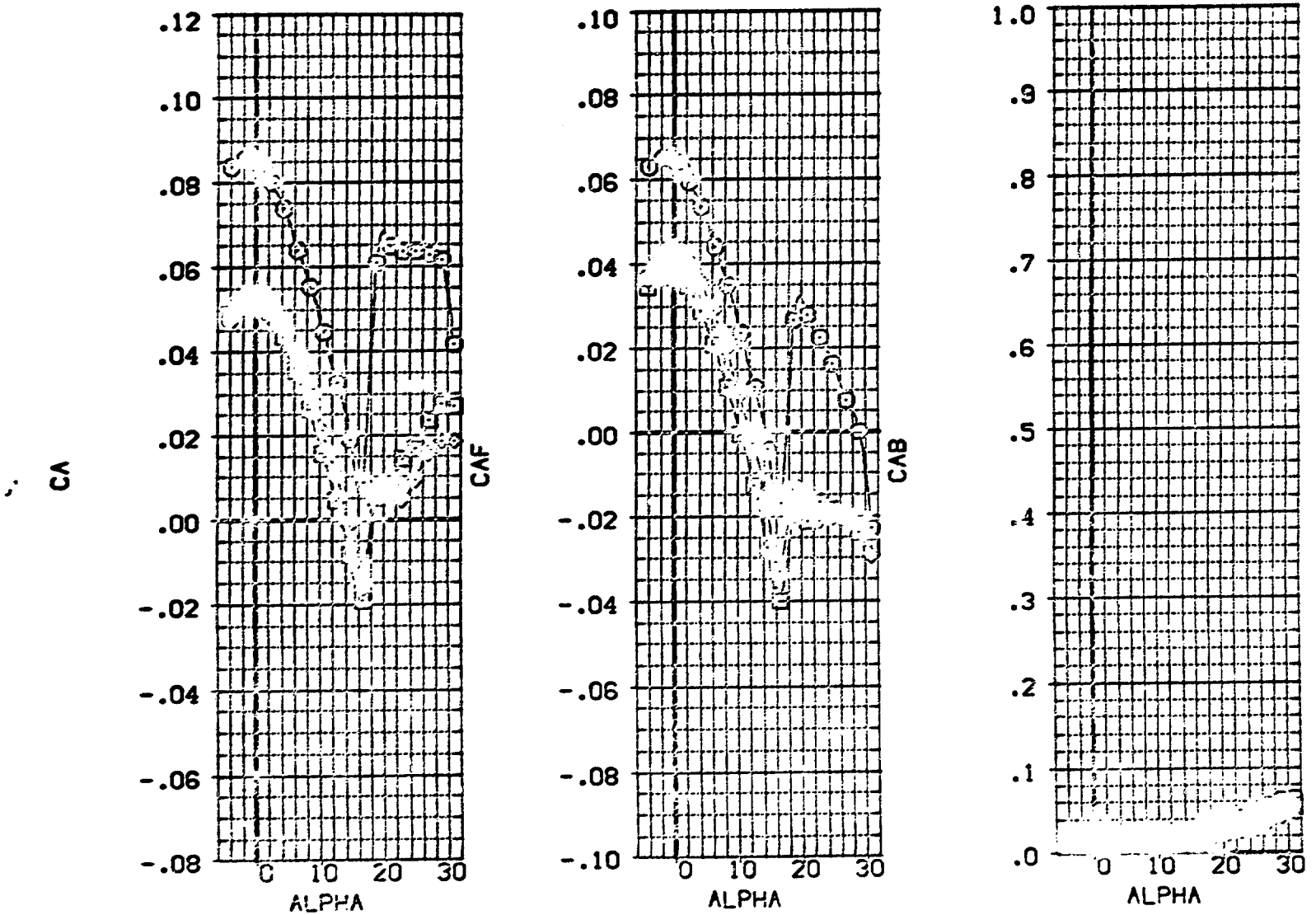


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ADU040)	OA71C B16CS07J34F1V87 E18V3R3X10
(ADU037)	OA71C B16CS07J34F1V87 E18V3R3X10
(ADU041)	OA71C B16CS07J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

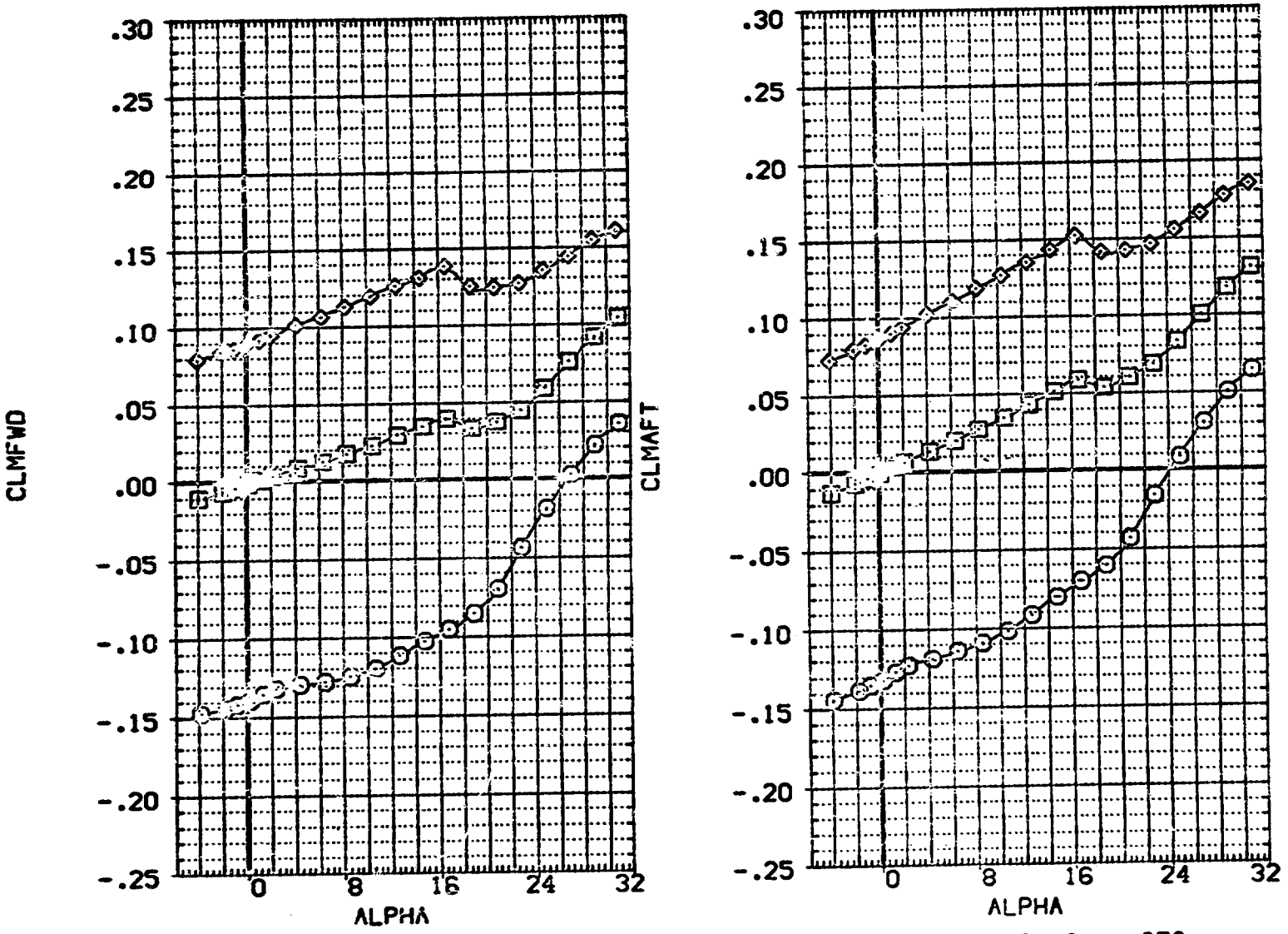


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(ADJ040)	○	0A71C B16C5D7J34F1V87 E18V3R3X10
(ADJ037)	□	0A71C B16C5D7J34F1V87 E19V3R3X10
(ADJC41)	◇	0A71C B16C5D7J34F1V87 E16V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

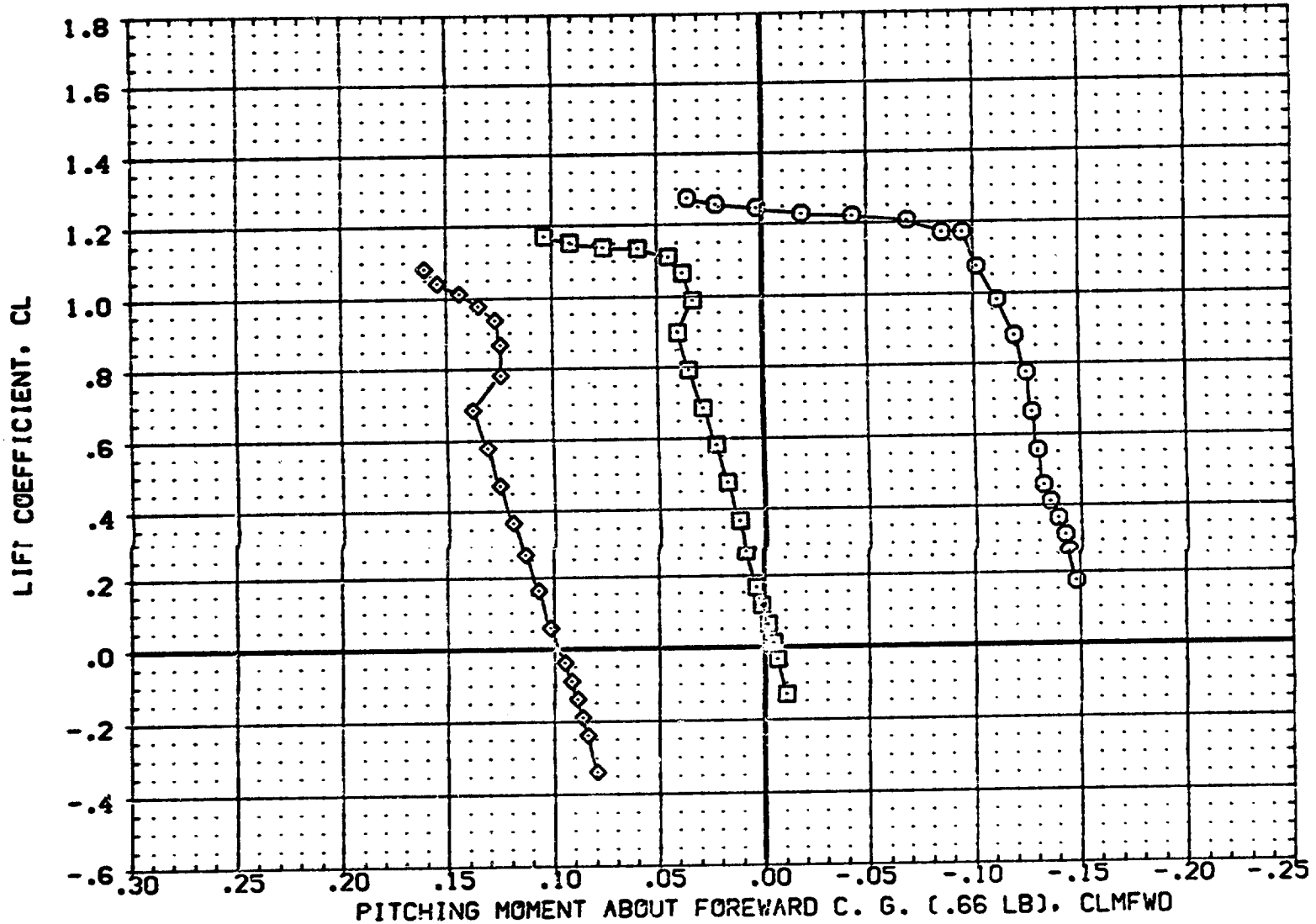


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACXL	NACLIP	NACBTA
(ADJ040)	CA71C B16CE07J34F1V87 E18V3R3X10	15.000	.000	7.000	5.000
(ADJ037)	CA71C B16CE07J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADJ041)	CA71C B16CE07J34F1V87 E18V3R3X10	-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

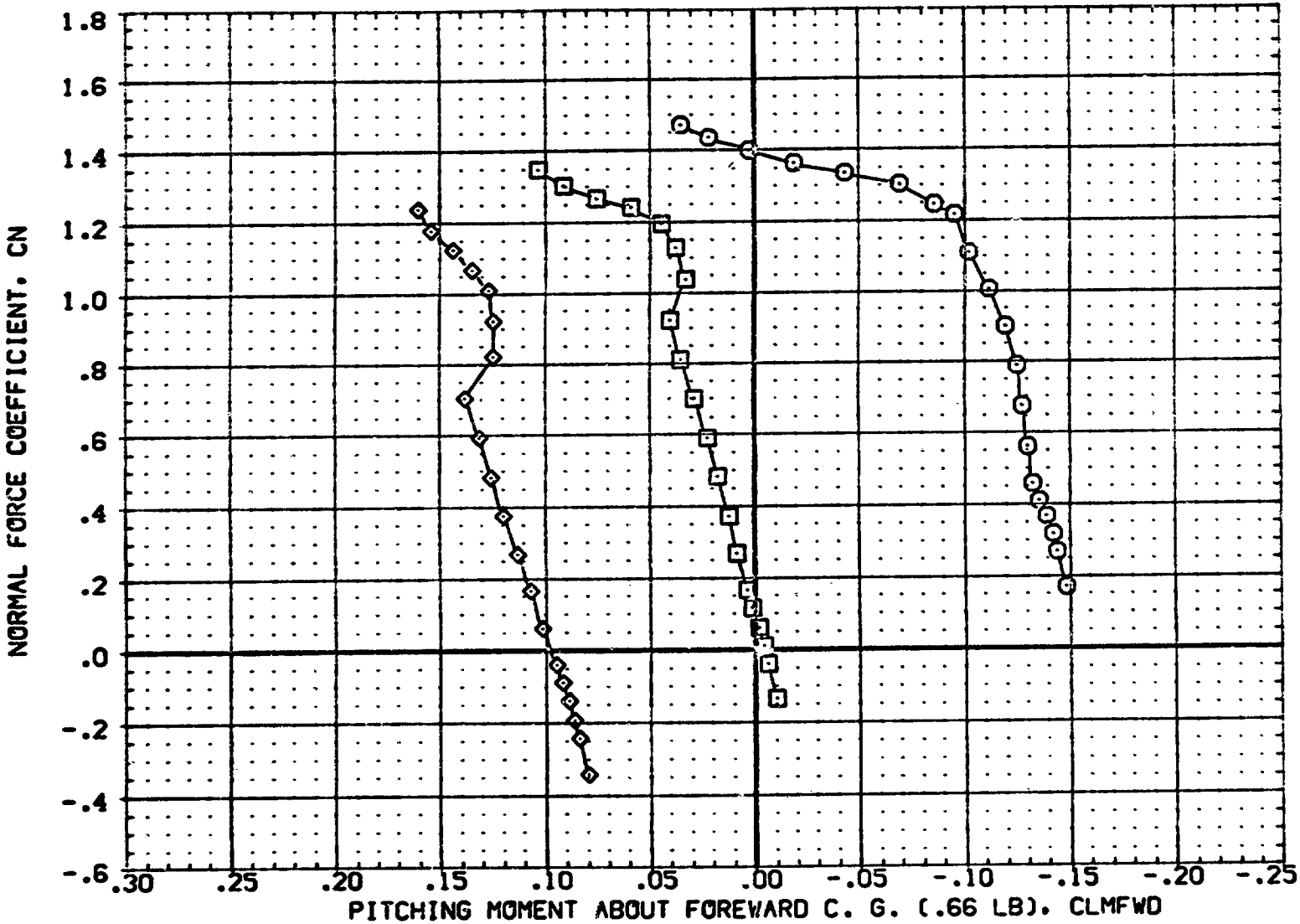


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ADJ040)	○	DA71C B16CSD7J34F1V87 E18V3R3X10
(ADJ037)	□	DA71C B16CSD7J34F1V87 E18V3R3X10
(ADJ041)	◇	DA71C B16CSD7J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

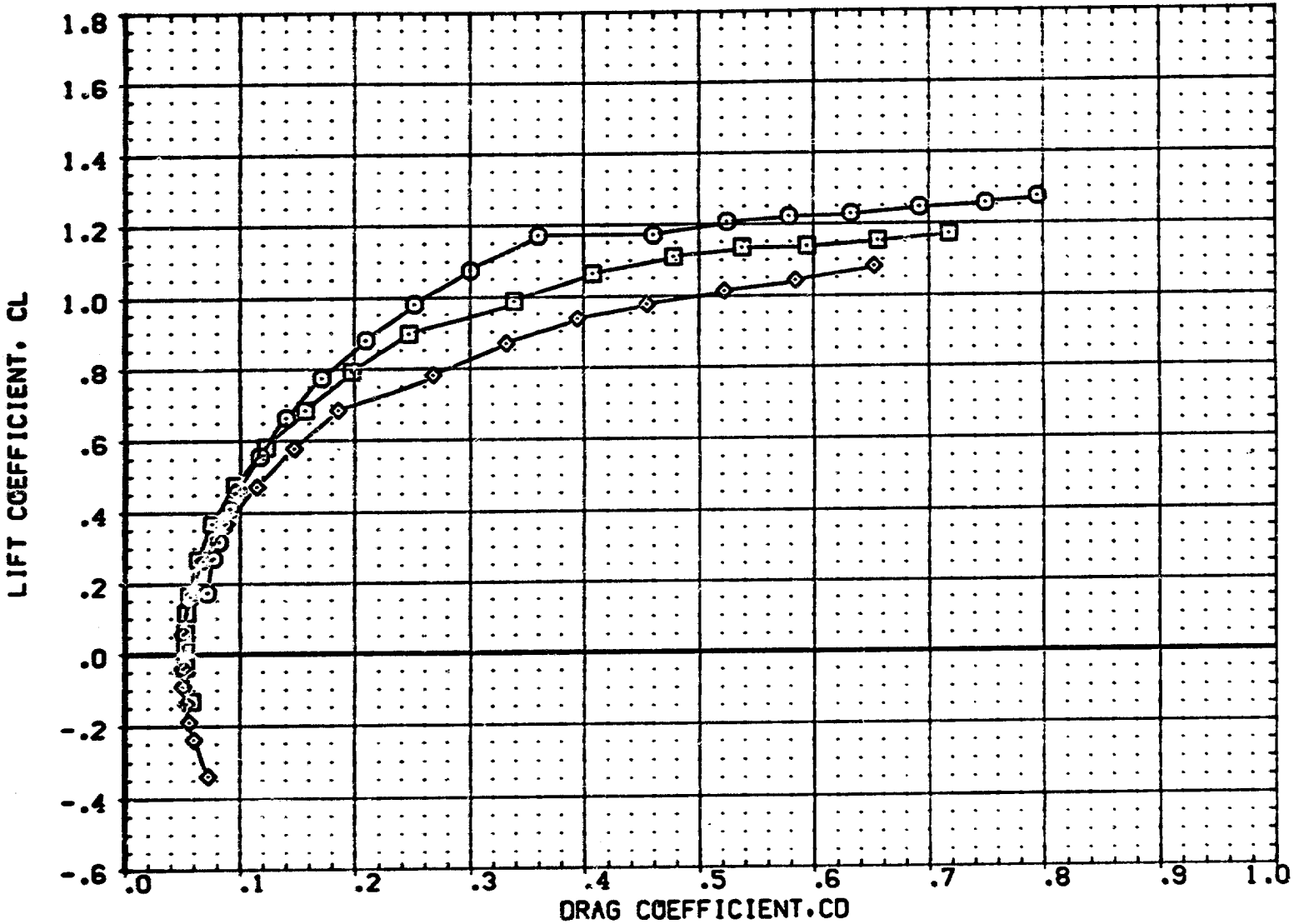


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

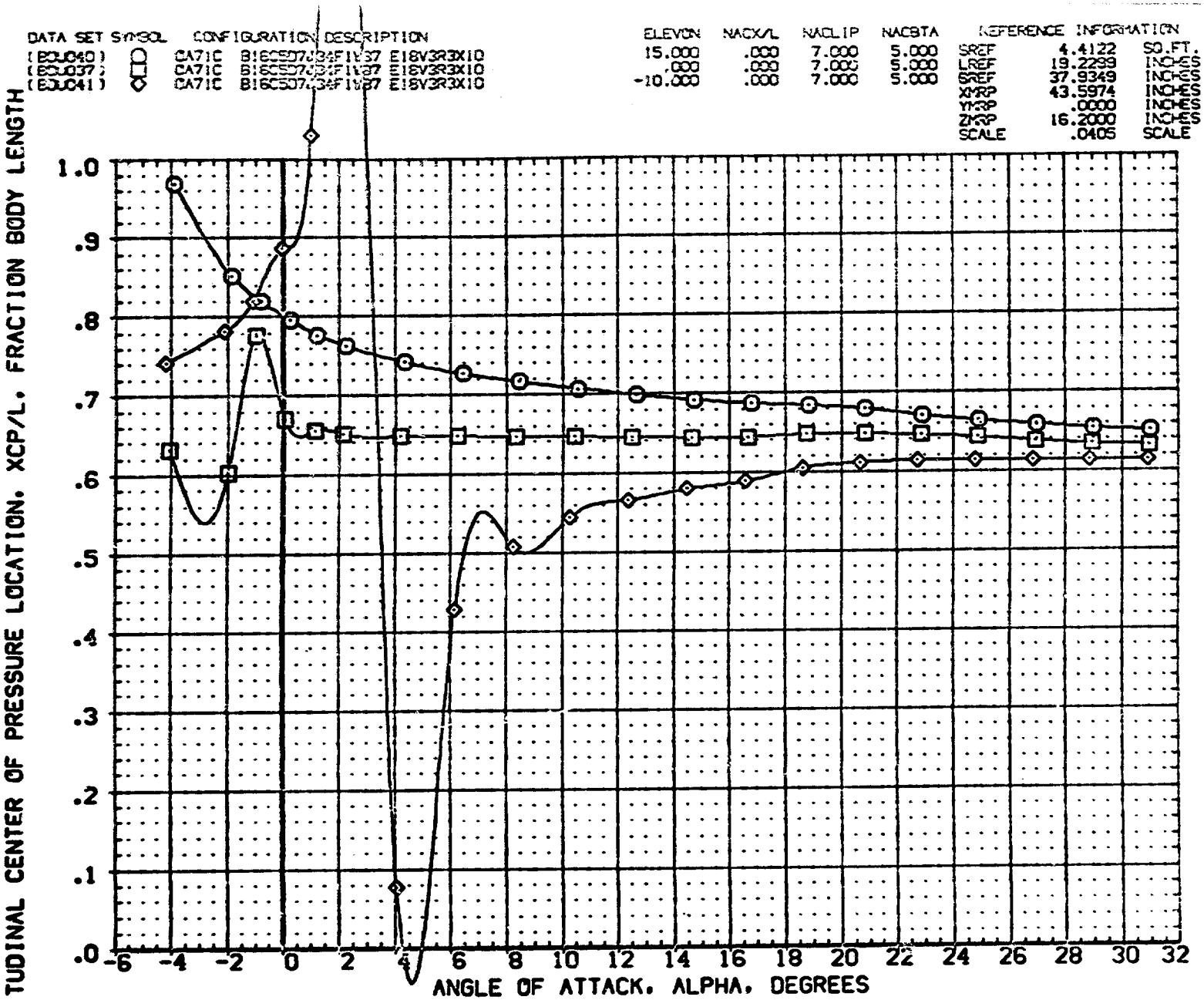


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(BDJ040) □	CA71C B16C507J34F1V37 E18V3R3X10
(BDJ037) ○	CA71C B16C507J34F1V37 E18V3R3X10
(BDJ041) ◇	CA71C B16C507J34F1V37 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

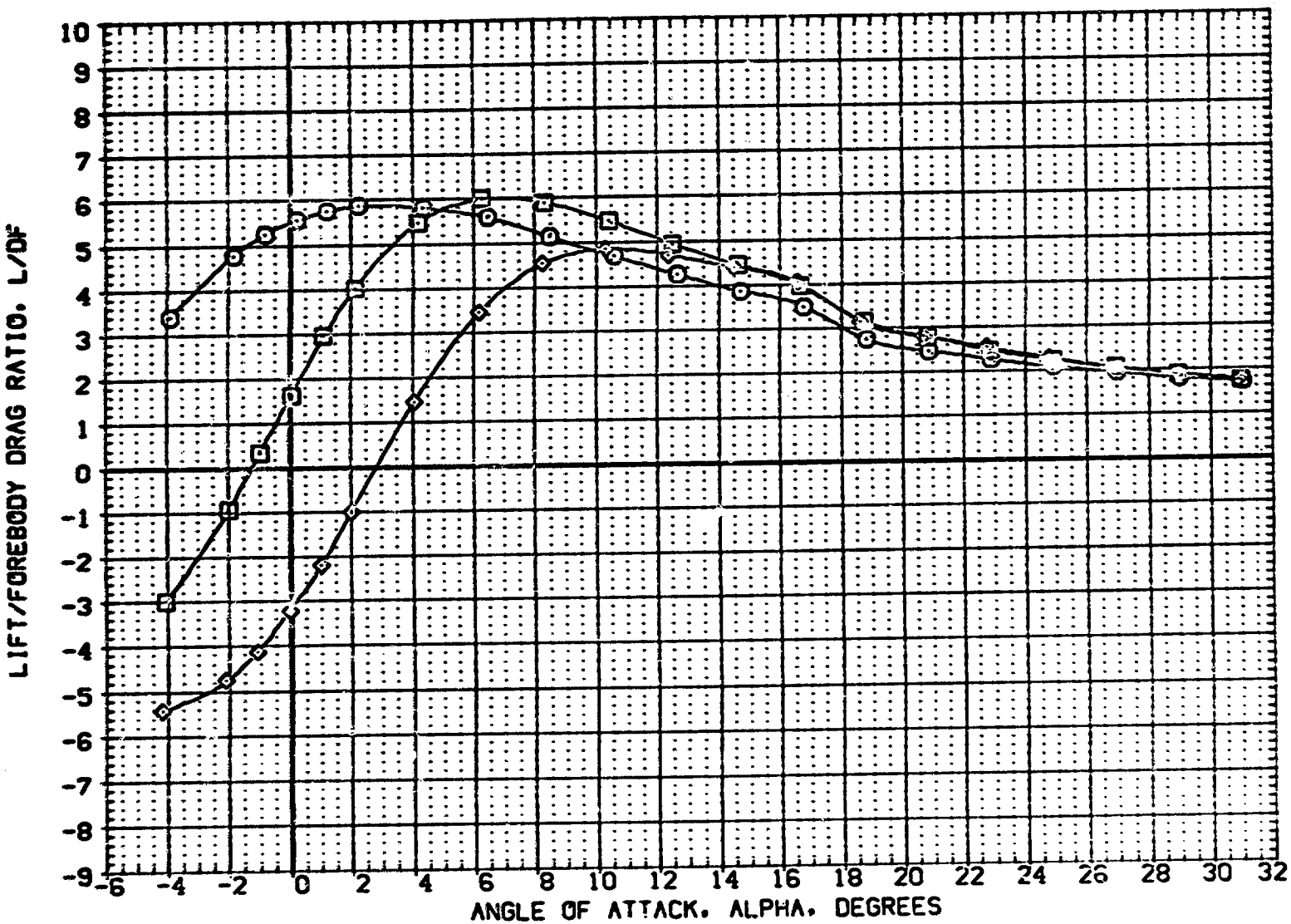


FIG 6 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 950

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	DELVON	NACX/L	NACLIP	NACBTA
(EDU040)	○	CA71C B16CSD7J34F1Y37 E18V3R3X10	15.000	.000	7.000	5.000
(EDU037)	□	CA71C B16CSD7J34F1V37 E18V3R3X10	.000	.000	7.000	5.000
(EDU041)	◇	CA71C B16CSD7J34F1V37 E18V3R3X10	-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2090	INCHES
SCALE	.0405	SCALE

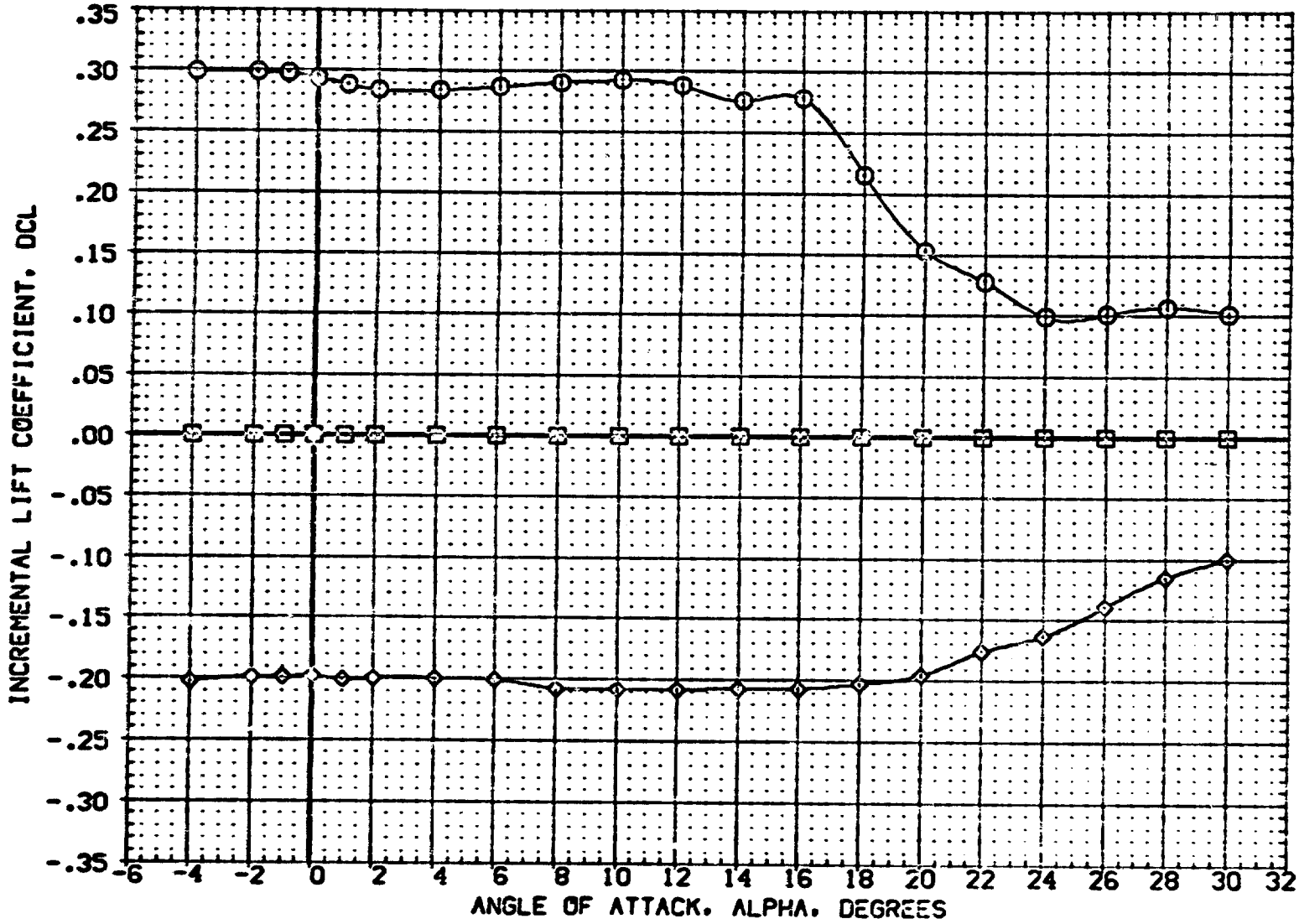


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .21

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	DELVON	NACX/L	NACLIP	NACBTA
(EDU040)	○	0A71C B16CS07J34F1V87 E18V3R3X10	15.000	.000	7.000	5.000
(EDU037)	□	0A71C B16CS07J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(EDU041)	◇	0A71C B16CS07J34F1V87 E18V3R3X10	-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2289	INCHES
BREF	37.9349	INCHES
XRP	43.5974	INCHES
YRP	.0000	INCHES
ZRP	16.2000	INCHES
SCALE	.0405	SCALE

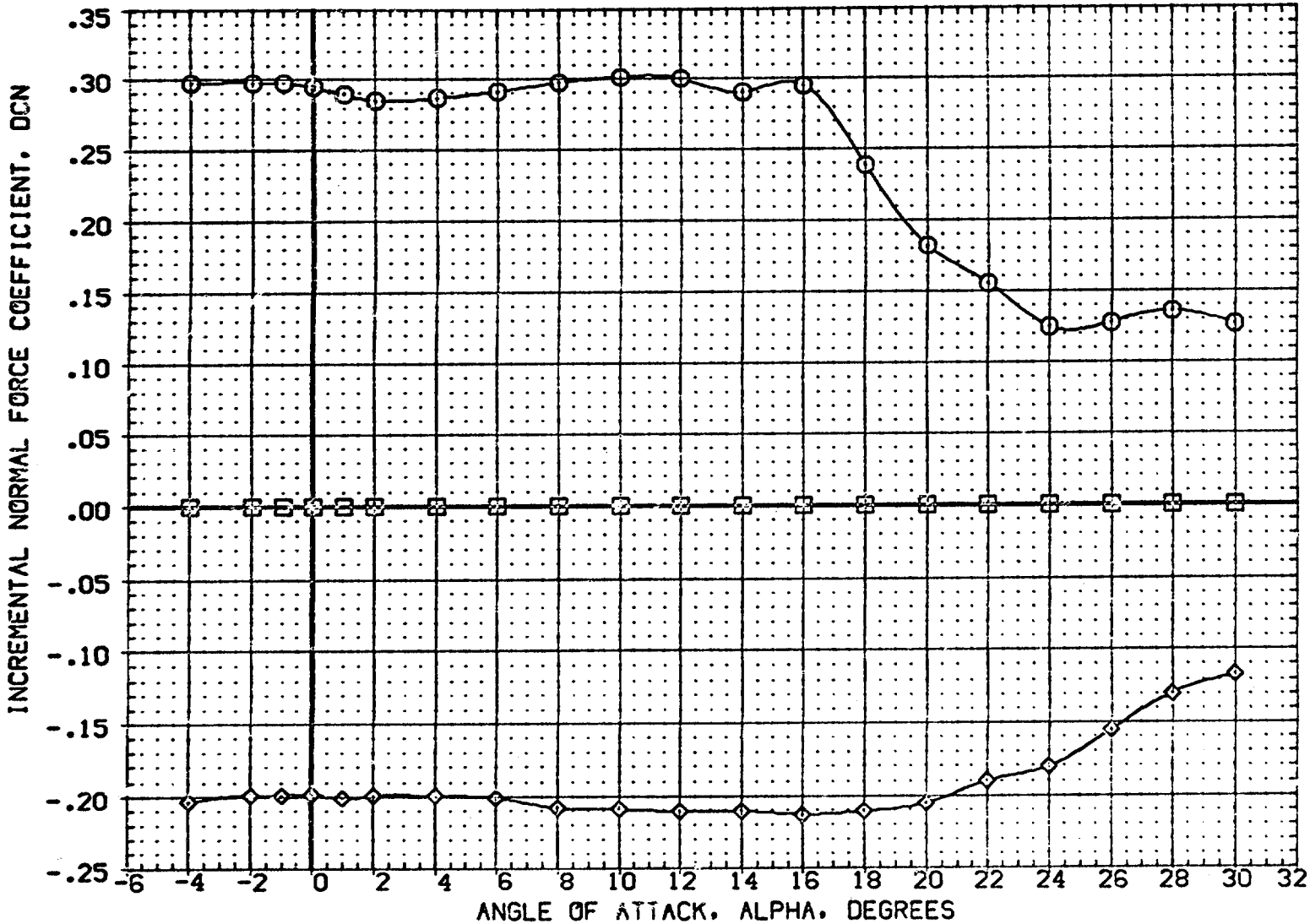


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .21

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(EDU040)	○	0A71C B1SCSD7J34F1V87 E18V3R3X10
(EDU037)	□	0A71C B16CSD7J34F1V87 E18V3R3X10
(EDU041)	◇	0A71C B16CSD7J34F1V87 E18V3R3X10

DELVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

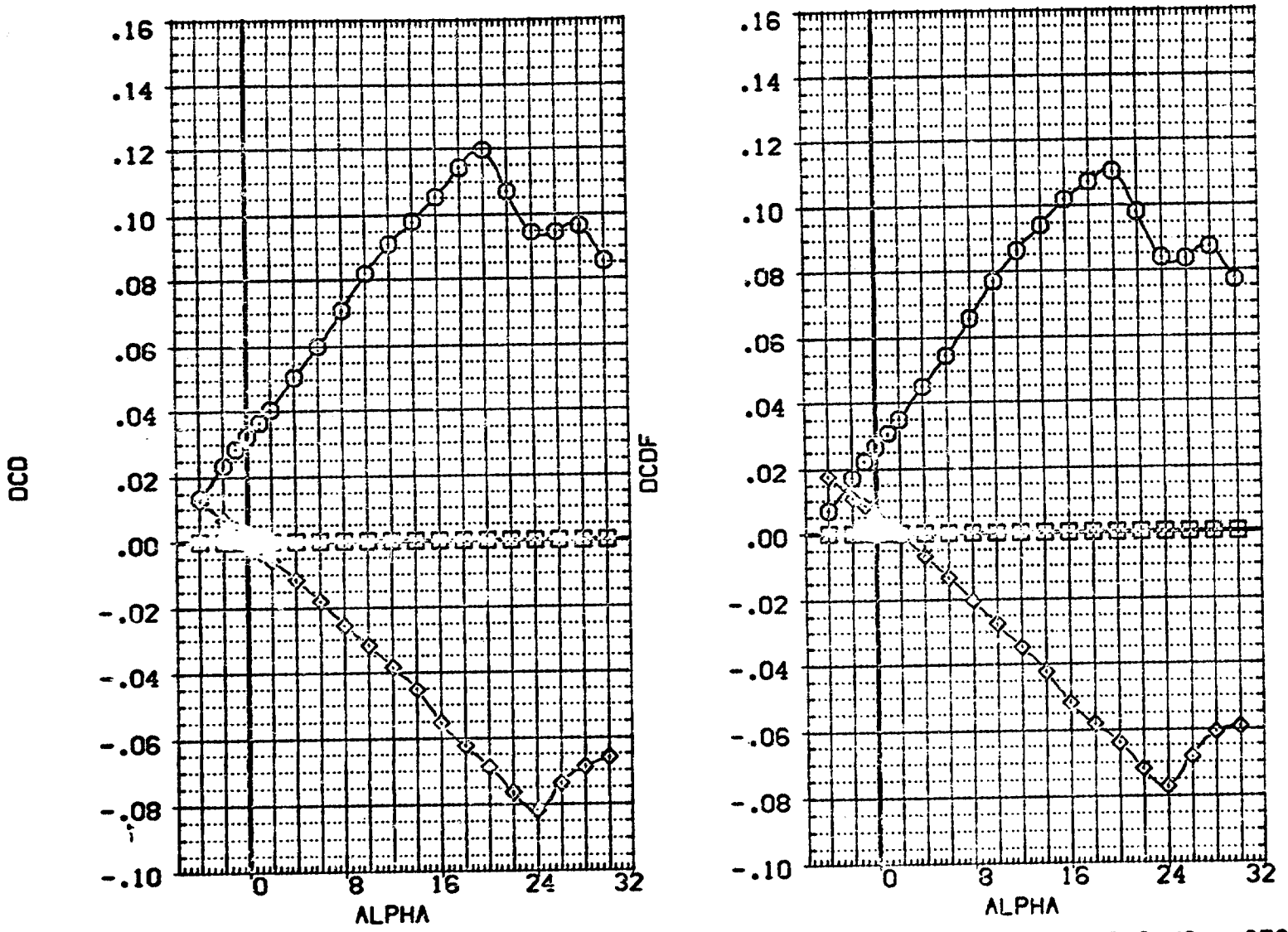


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES.UNDERWING XO= 950

(A)MACH = .21

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	DELVON	NACX/L	NACLIP	NACBTA
(EDU040)	□	CA71C B1SCS07J34F1V87 E18V3R3X10	15.000	.000	7.000	5.000
(EDU037)	◁□	CA71C B1GCS07J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(EDU041)	◇	CA71C B1GCS07J34F1V87 E1GV3R3X10	-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

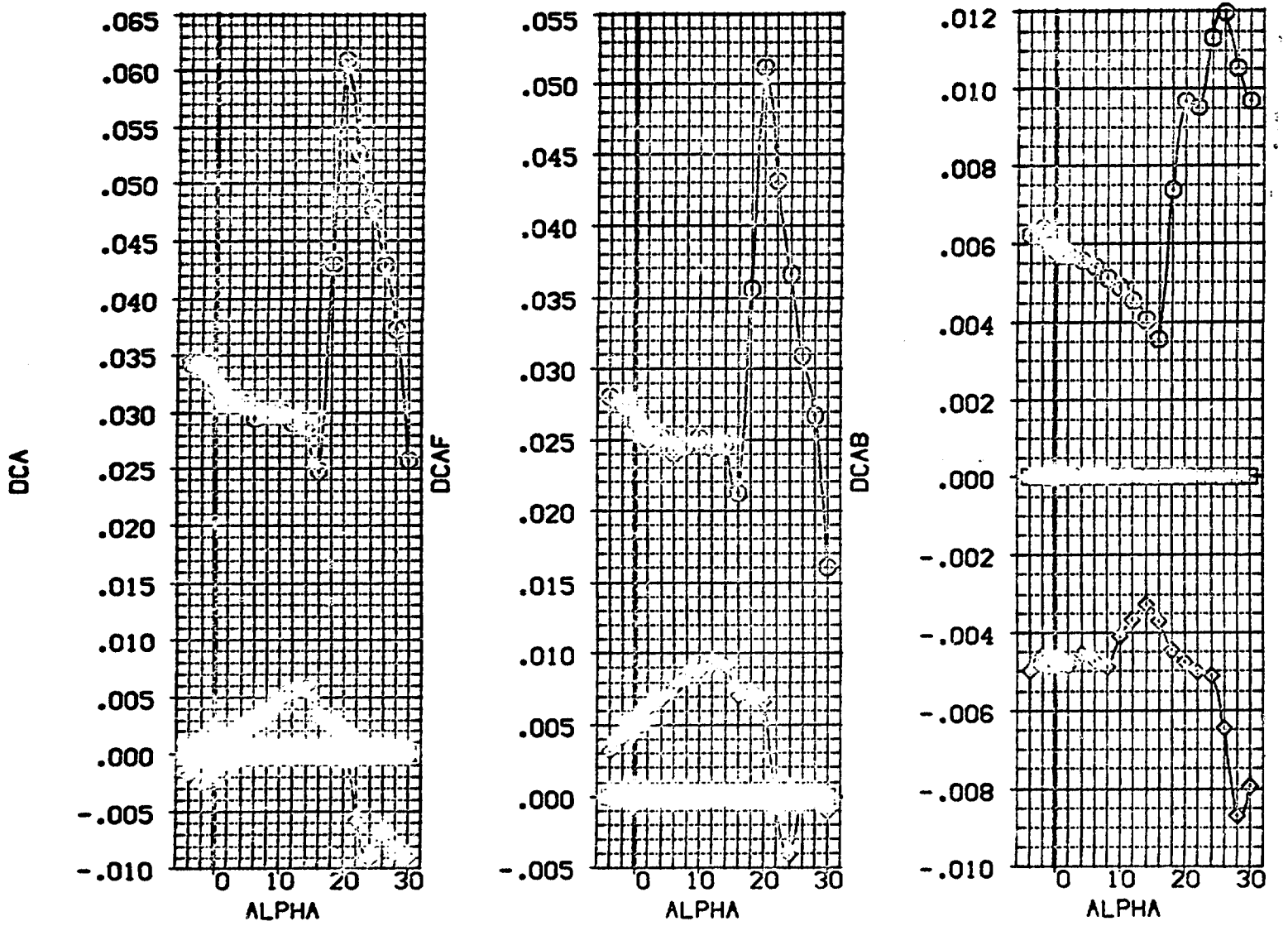


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .21

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(EDU040)	○	0A71C B16CSD7J34F1V87 E18V3R3X10
(EDU037)	□	0A71C B16CSD7J34F1V87 E18V3R3X10
(EDU041)	◇	0A71C B16CSD7J34F1V87 E18V3R3X10

DELVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

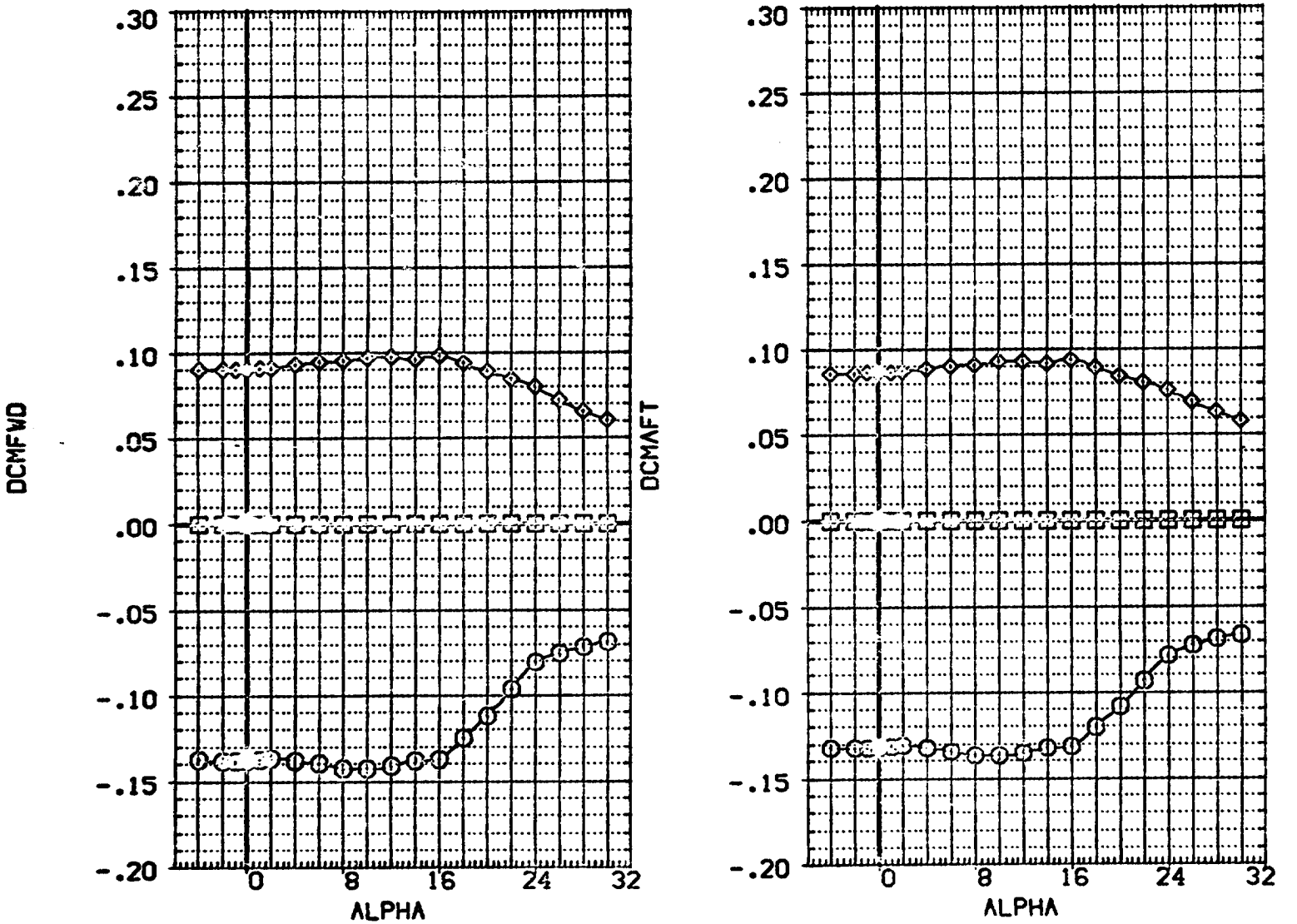


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .21

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU040)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BOFLAP	-18.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▱	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

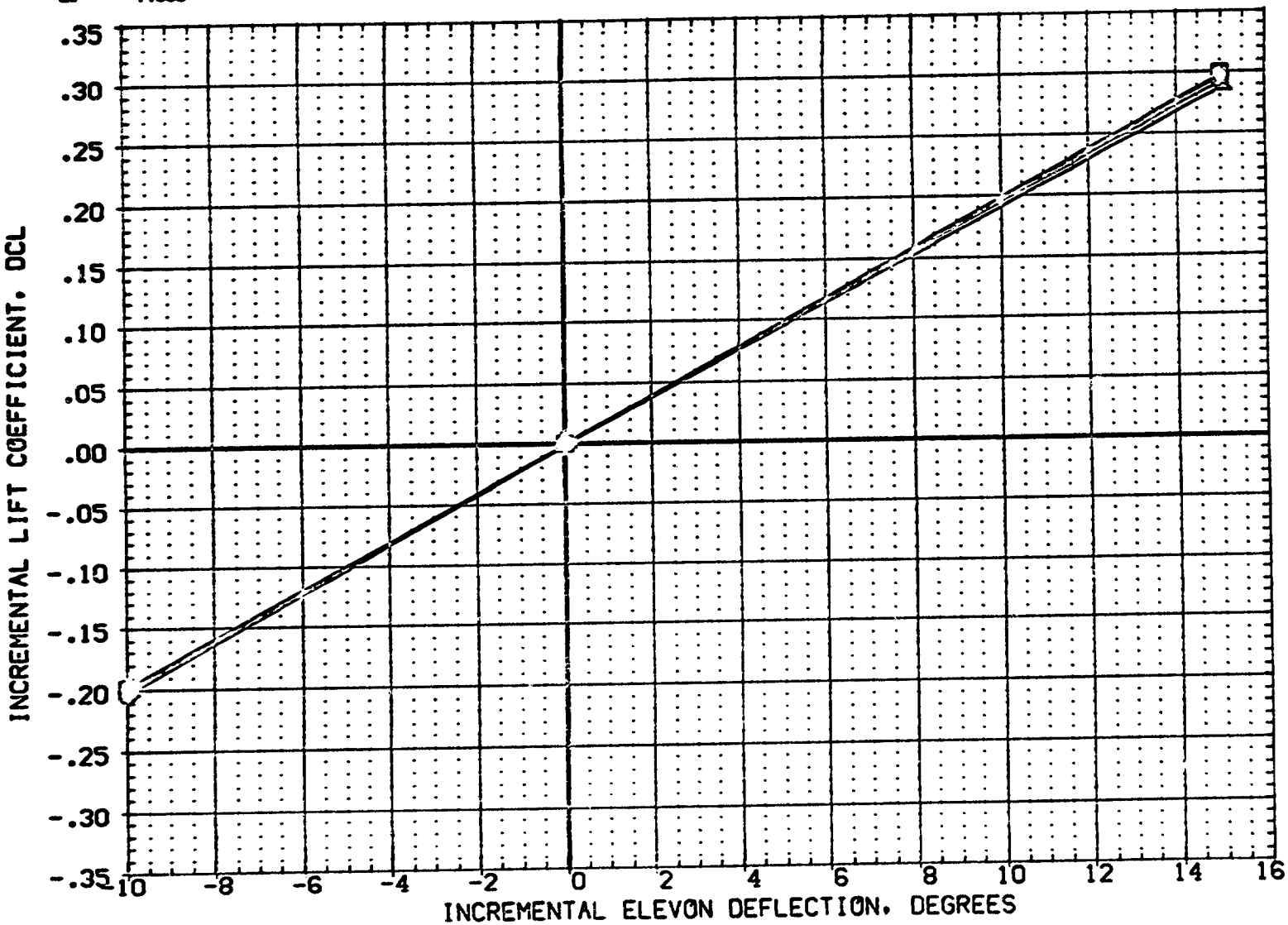


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU040)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	2.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	4.000	BDFLAP	-18.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2299	INCHES
◇	6.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			XMRP	37.9349	INCHES
△	8.000	BETA	.000	RUDDER	.000					YMRP	43.5974	INCHES
▽	10.000									ZMRP	.0000	INCHES
										SCALE	16.2000	INCHES
											.0405	SCALE

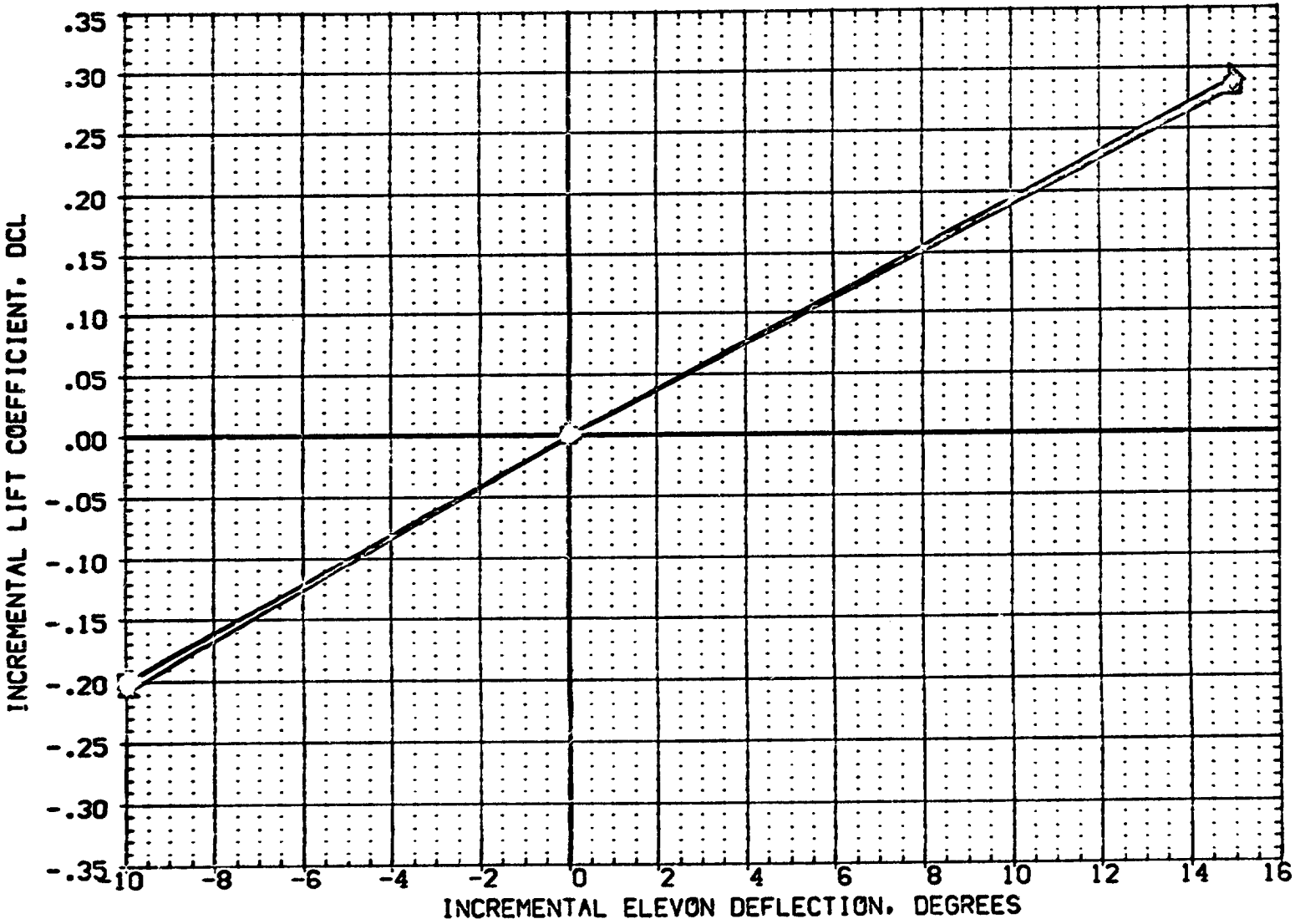


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

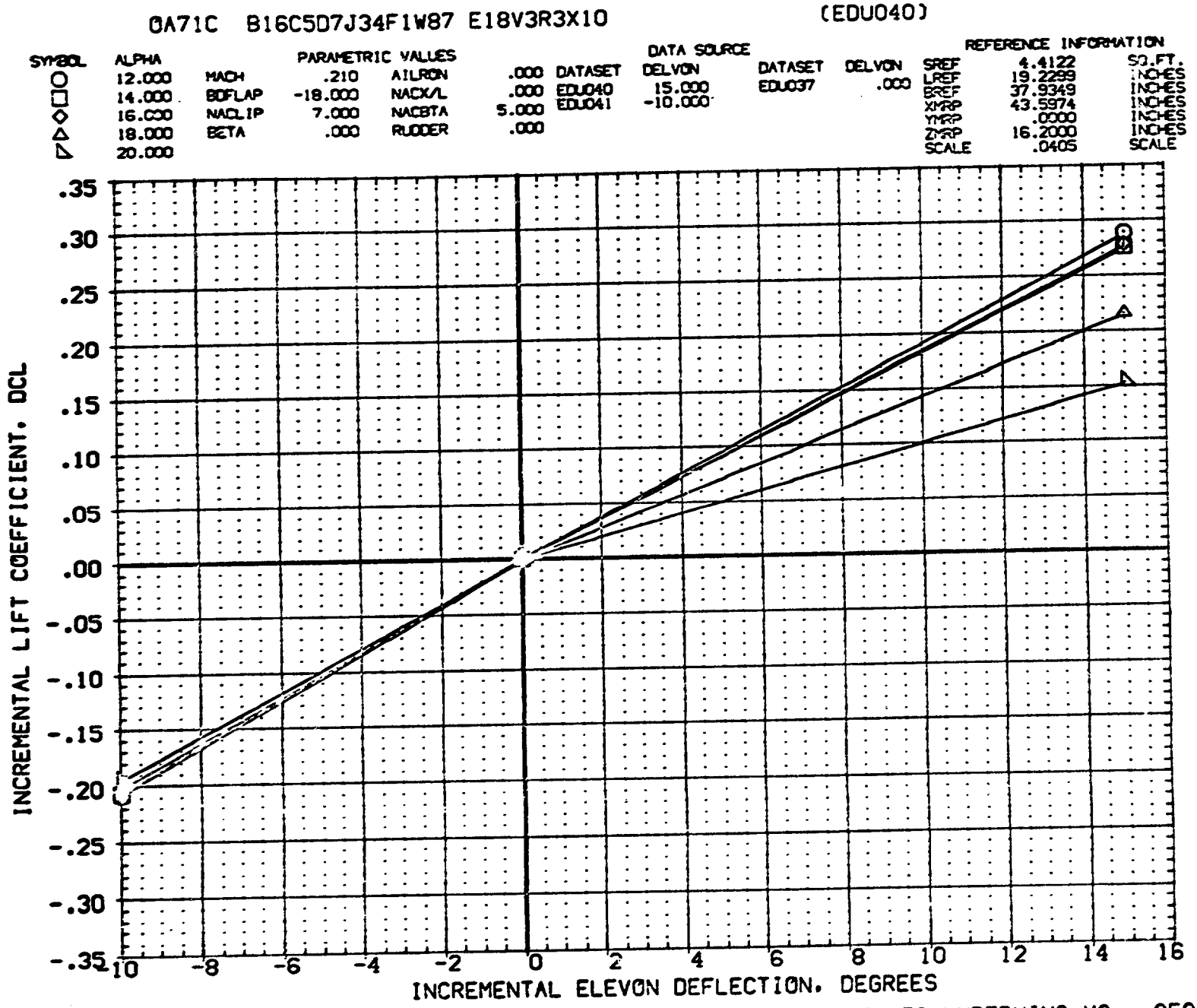


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	SOFLAP	-18.000	NACWL	.000	EDUC40	15.000	EDUC37	.000	LREF	19.2265	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDUC41	-15.000			BREF	37.6349	INCHES
△	28.000	BETA	.000	RUDDEP	.000					XCG	43.5574	INCHES
▽	30.000									YCG	.0000	INCHES
										ZCG	16.2000	INCHES
										SCALE	.0625	SCALE

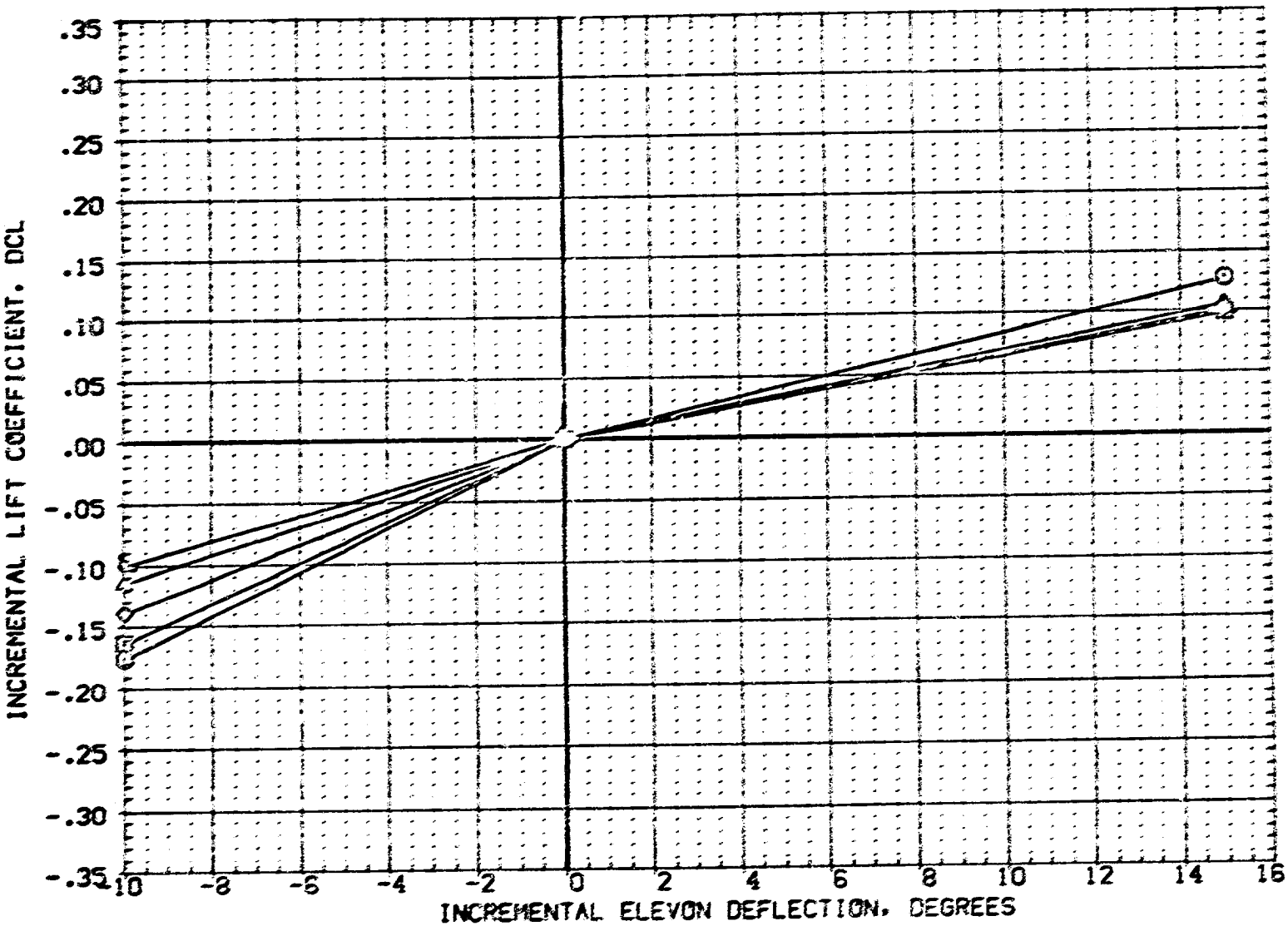


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

0A71C B16C5D7J34F1W87 E18V3R3 0 (EDU040)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BDFLAP	-18.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

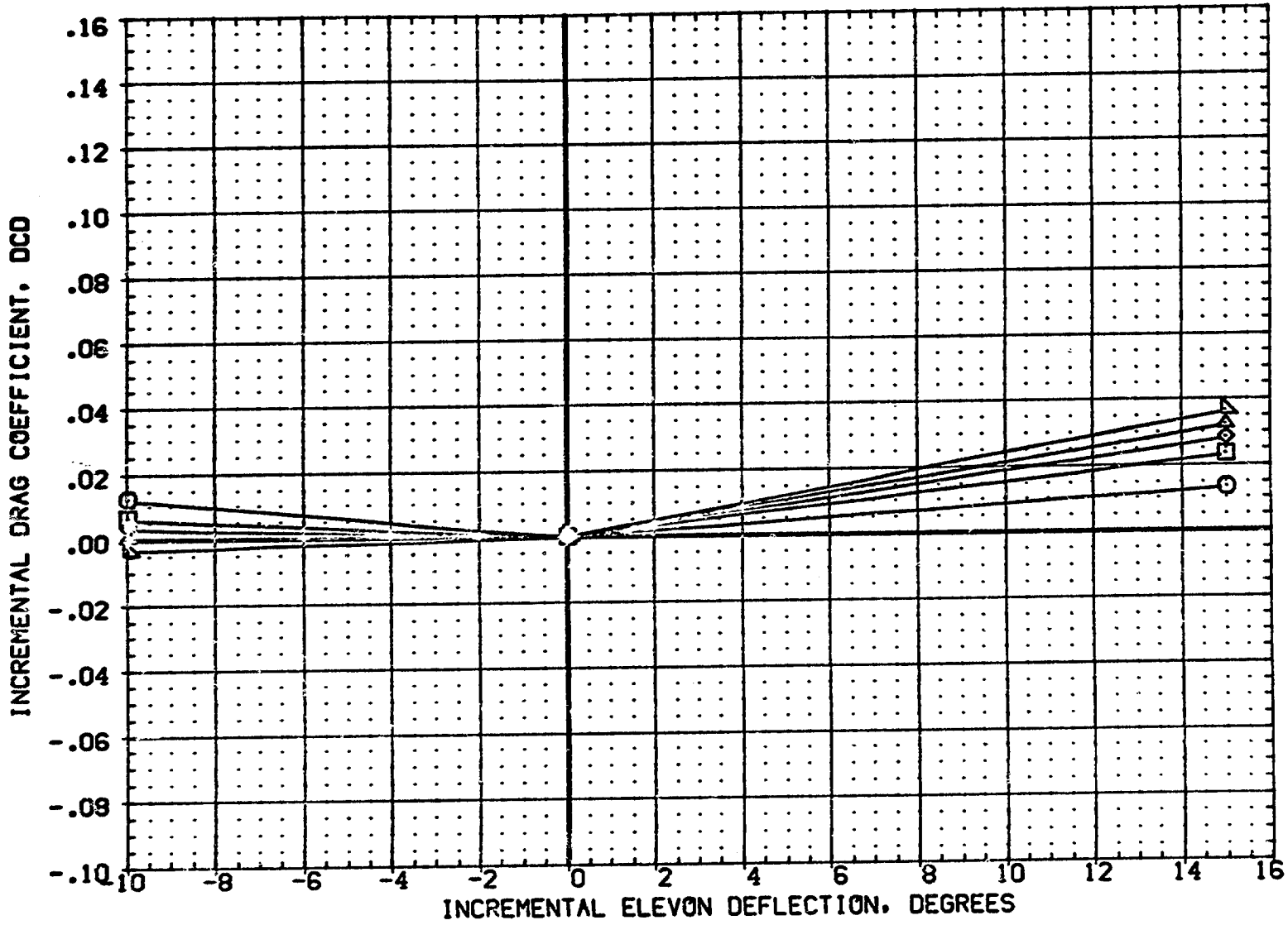


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

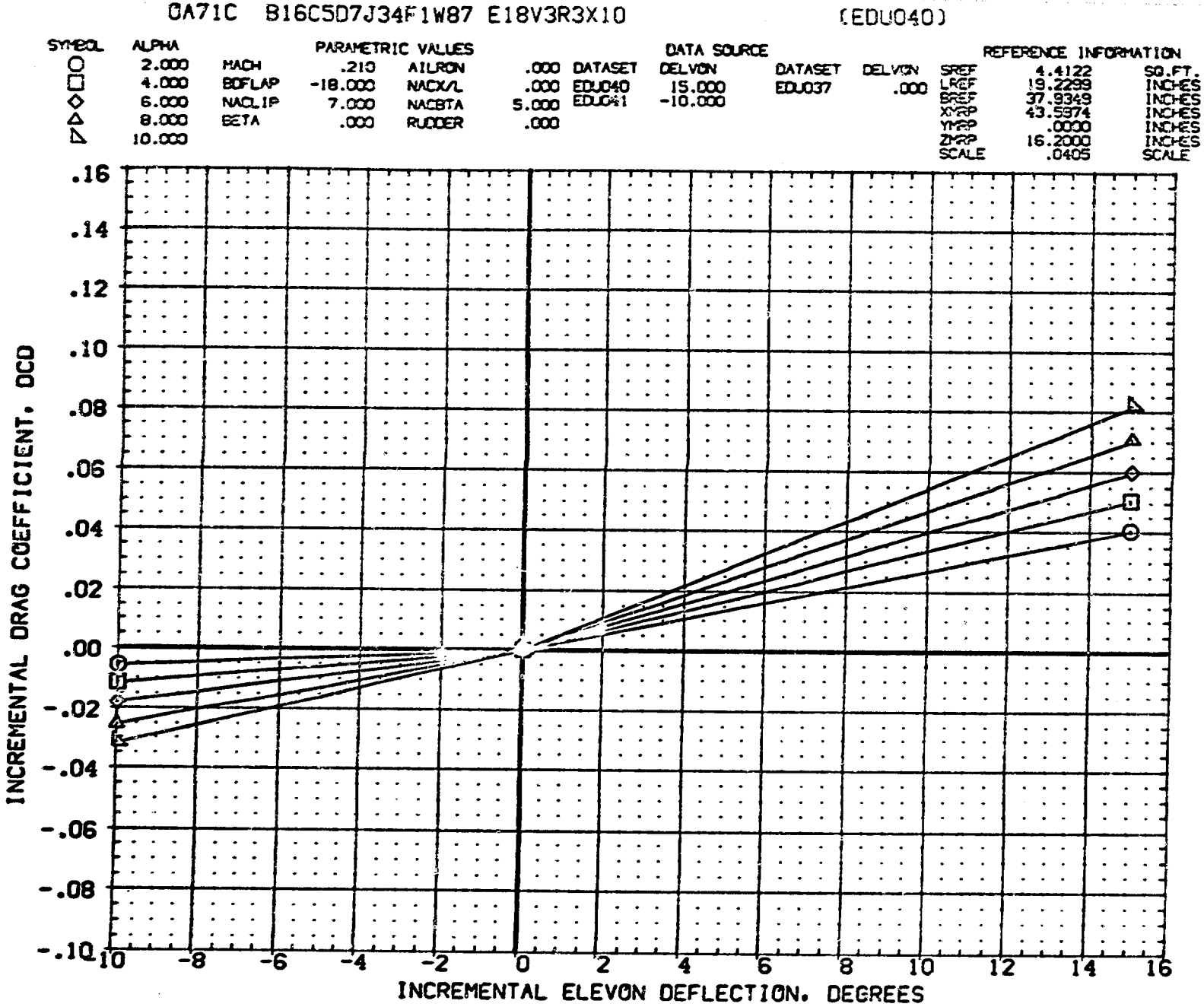


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

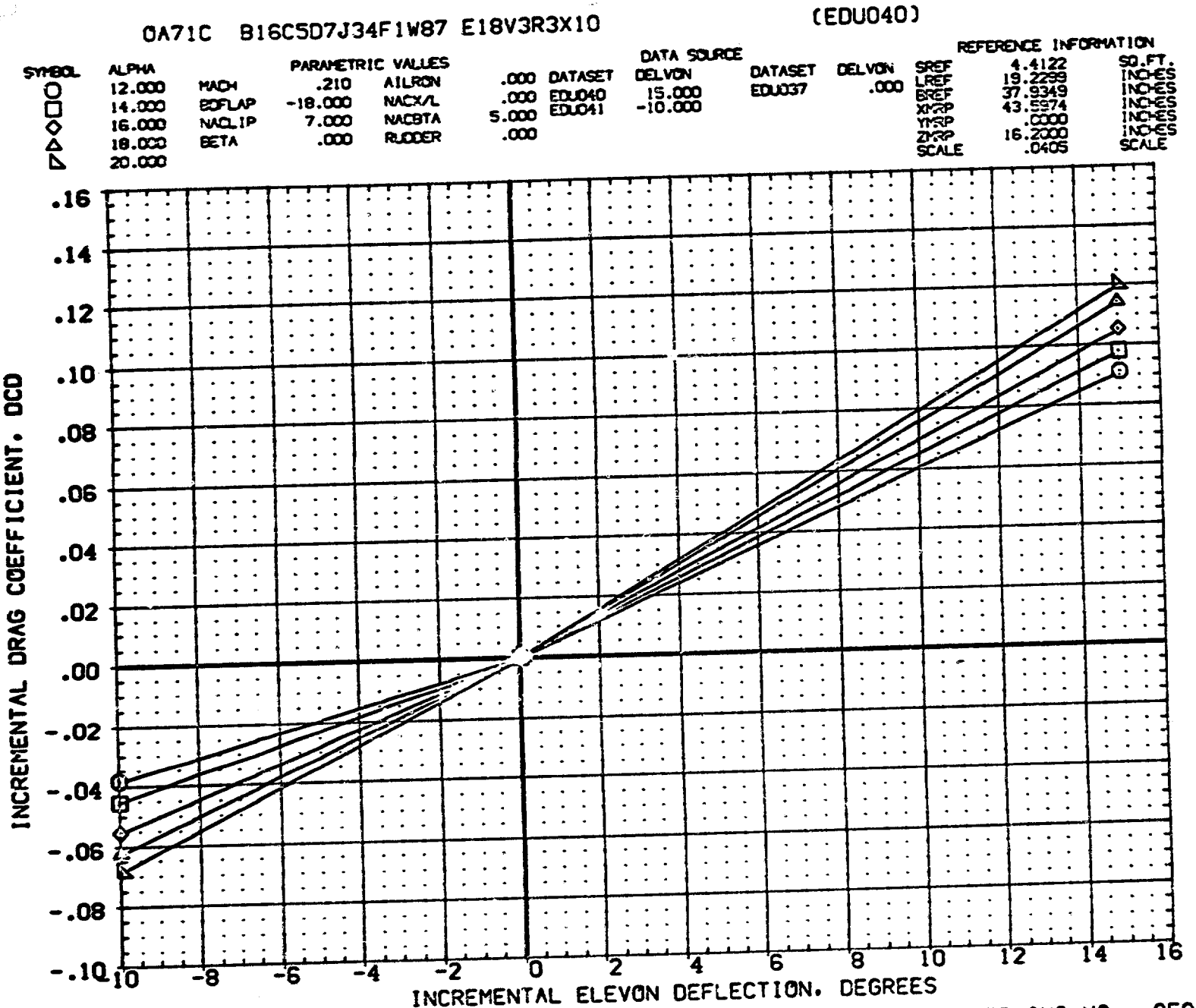


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

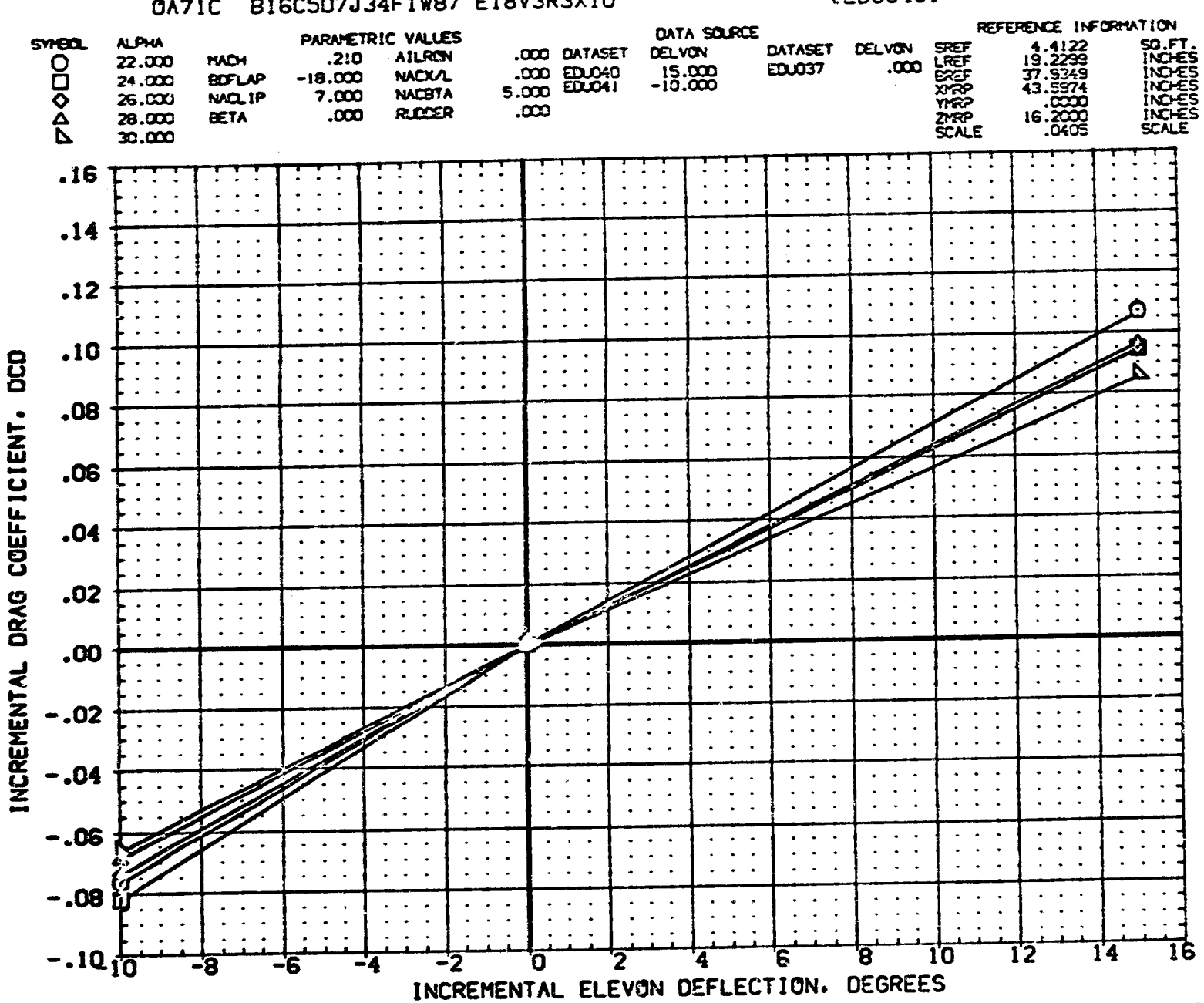


FIG 7 INCREMENTAL EFFECT OF ELEVONS --CLUSTERED NACELLES UNDERWING XO= 950

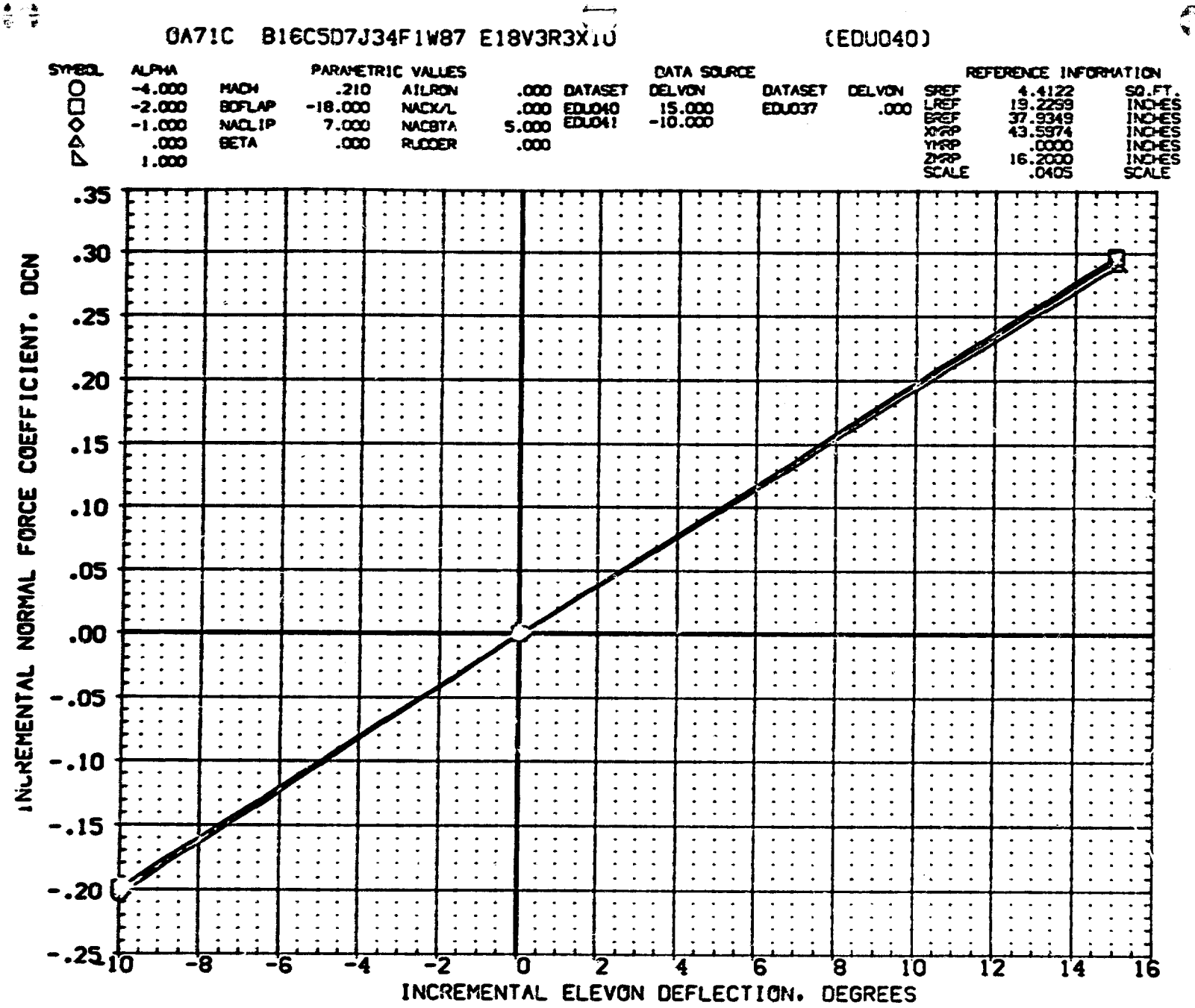


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

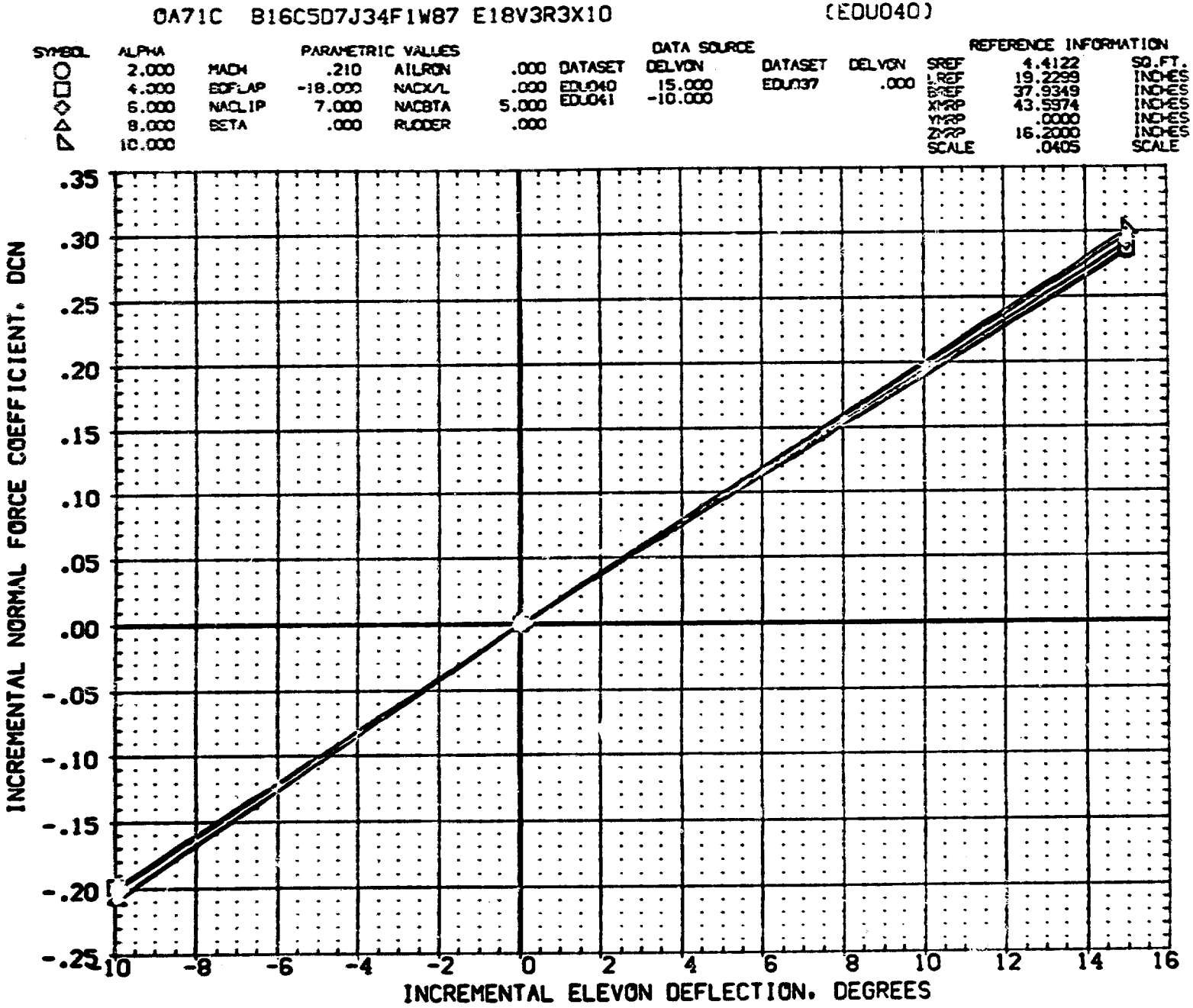


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU040)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	EDFLAP	-18.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2299	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			BREF	37.9349	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	20.000									YMRP	.000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

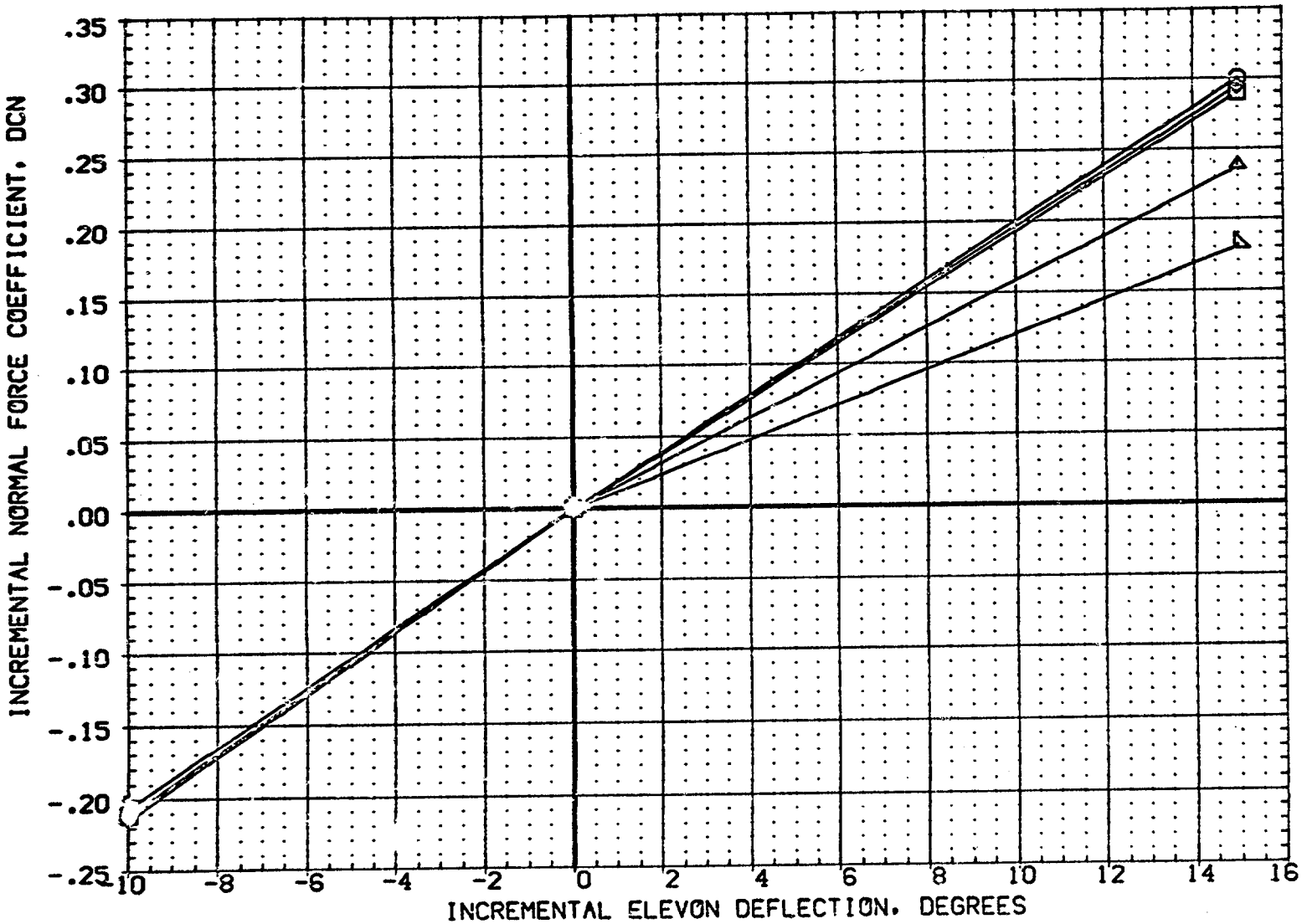


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	SGFLAP	-18.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2299	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

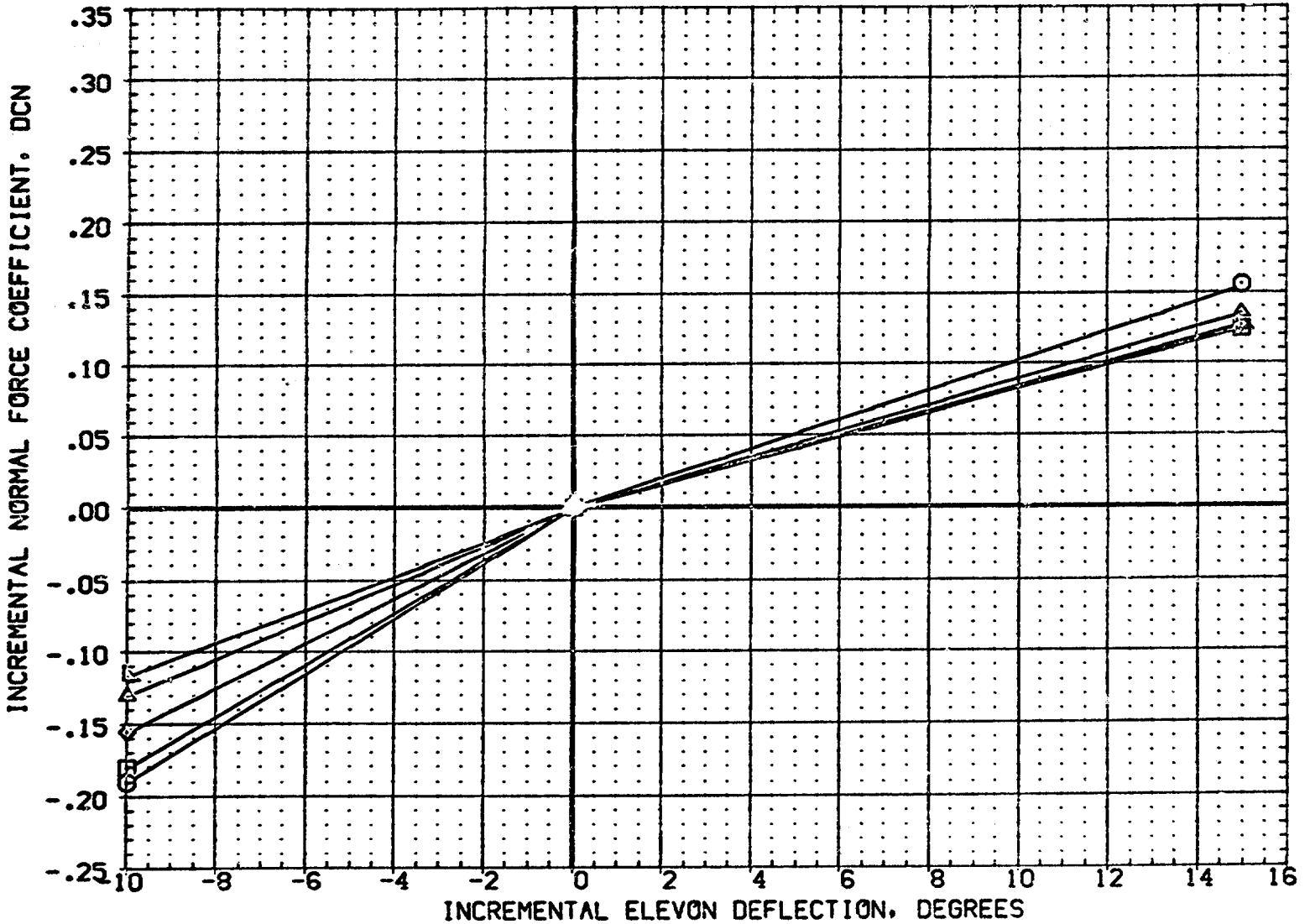


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

0A71C B16C5D7J34F1W87 E18V3R3X1 (EDU040)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BDFLAP	-18.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5574	INCHES
▽	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

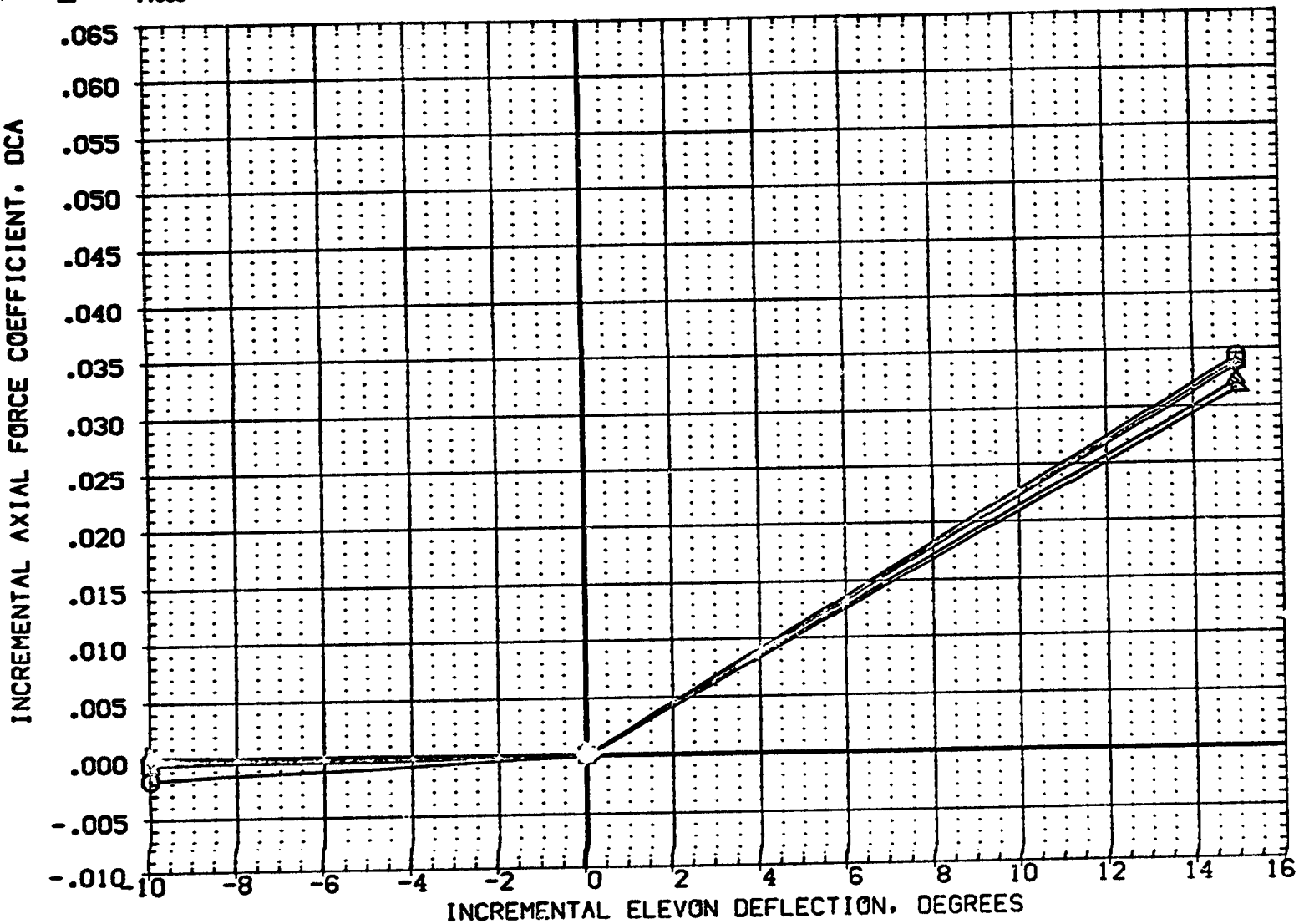


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU040)

SYMBOL	ALPHA
○	2.000
□	4.000
◇	6.000
△	8.000
▷	10.000

PARAMETRIC VALUES

MACH	.210	AILRON	.000	
BOFLAP	-18.000	NACX/L	.000	
NACLIP	7.000	NACBTA	5.000	
BETA	.000	RUDDER	.000	

DATA SOURCE

DATASET	DELVON	DATASET	DELVON
EDU040	15.000	EDU037	.000
EDU041	-10.000		

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

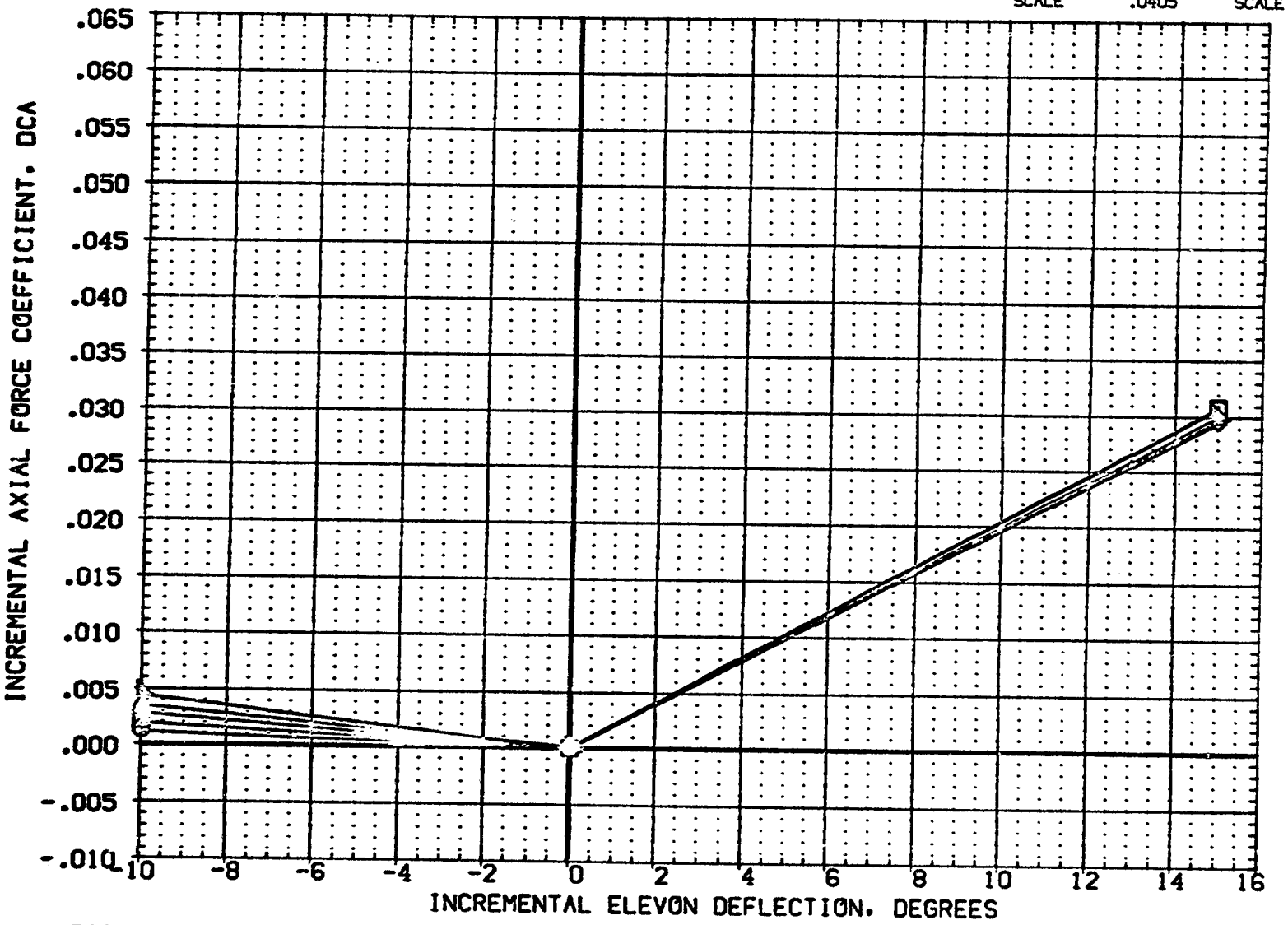


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU040)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	BDFLAP	-18.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2299	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			BREF	37.9349	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
◺	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

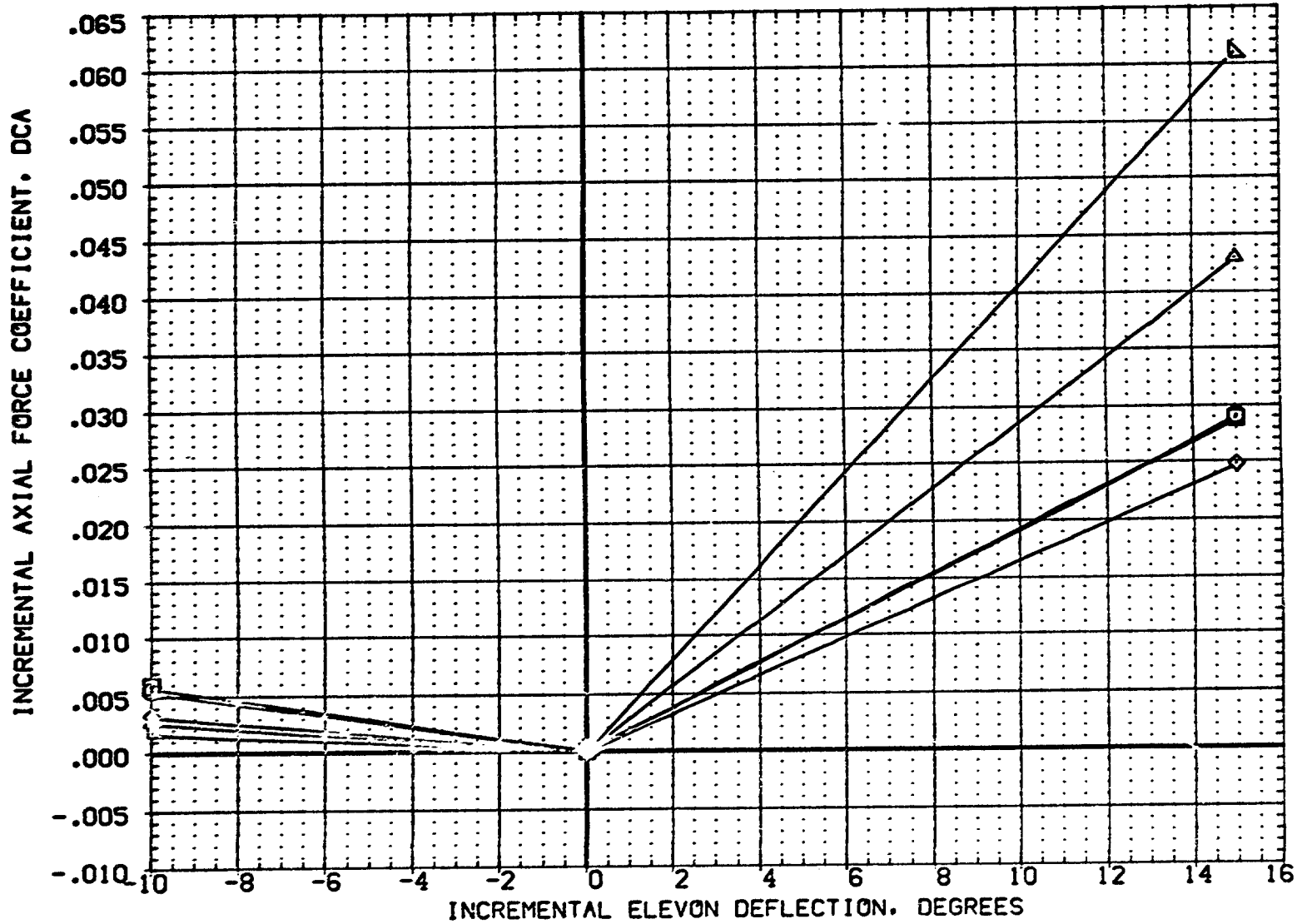


FIG 7 - INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU040)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	BOFLAP	-18.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2299	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

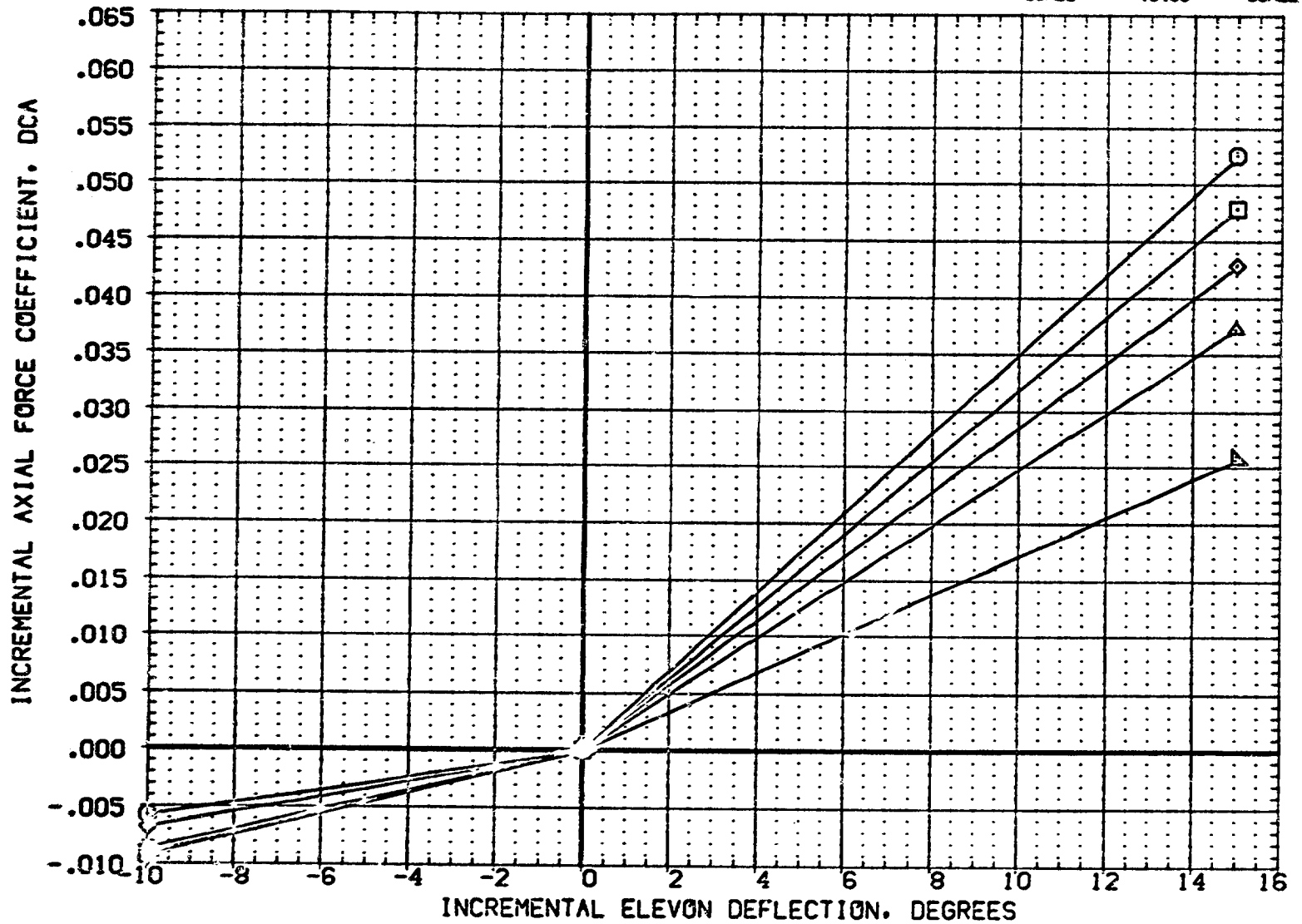


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

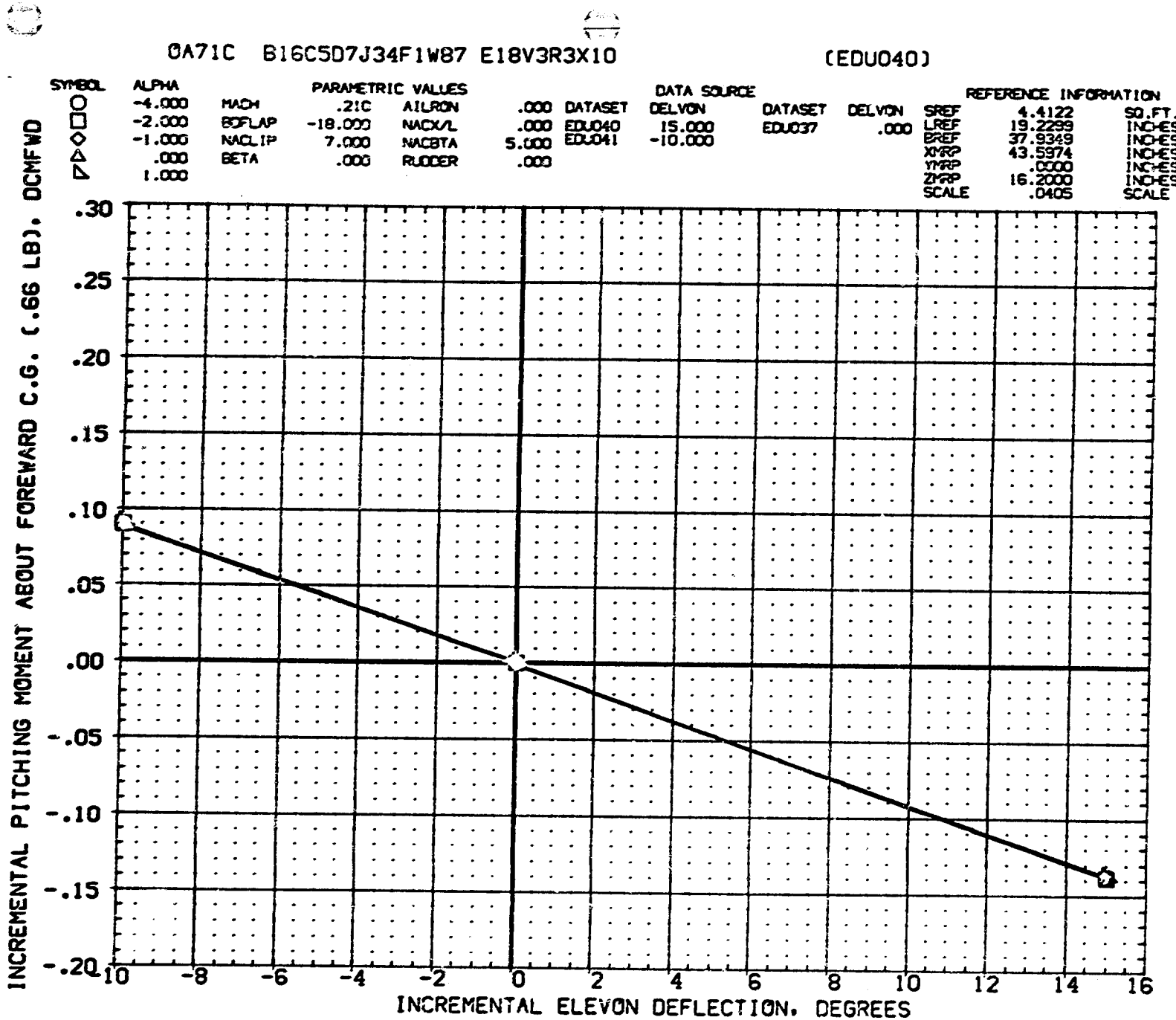


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

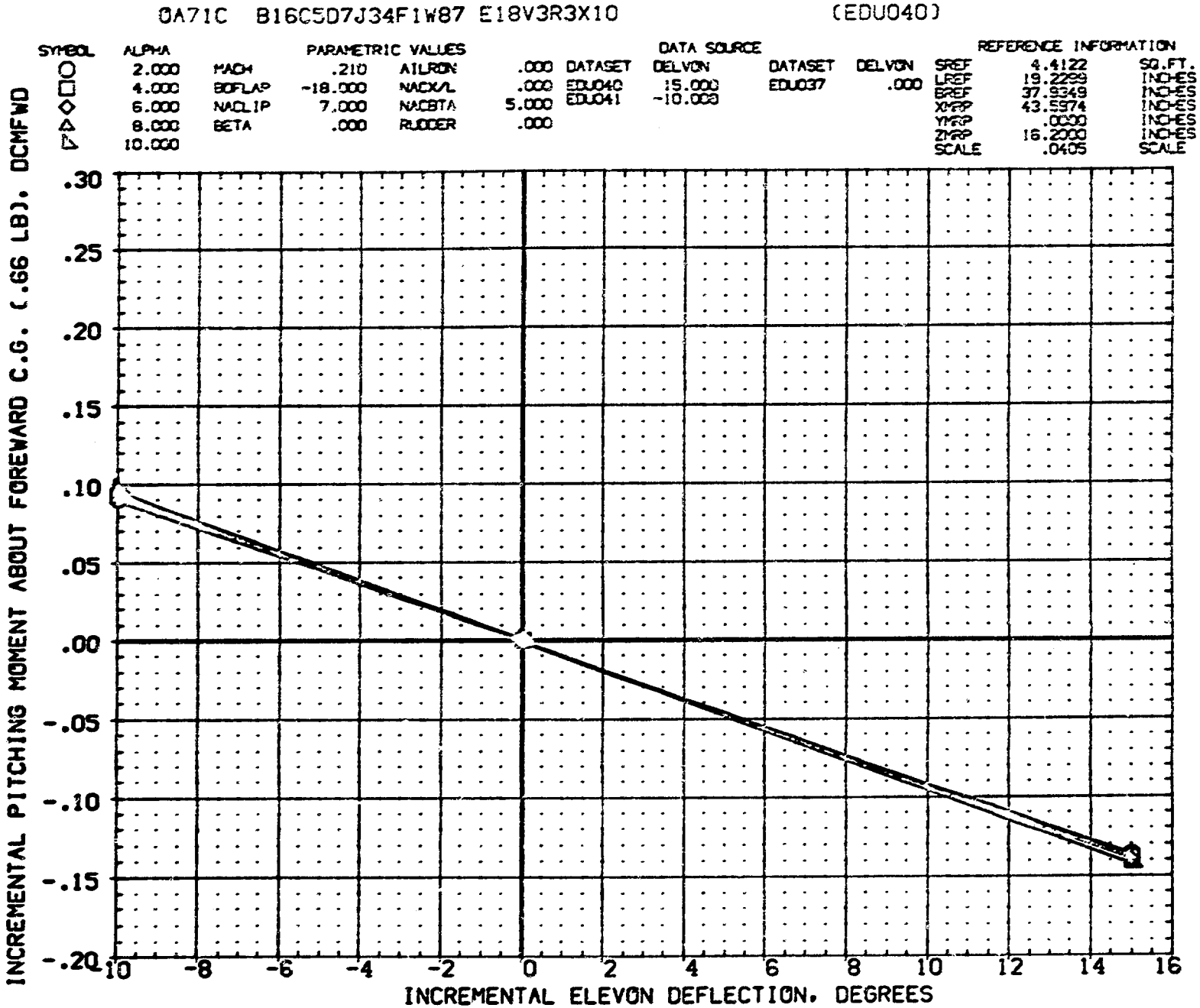


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU040)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	BOFLAP	-10.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2299	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			BREF	37.9349	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

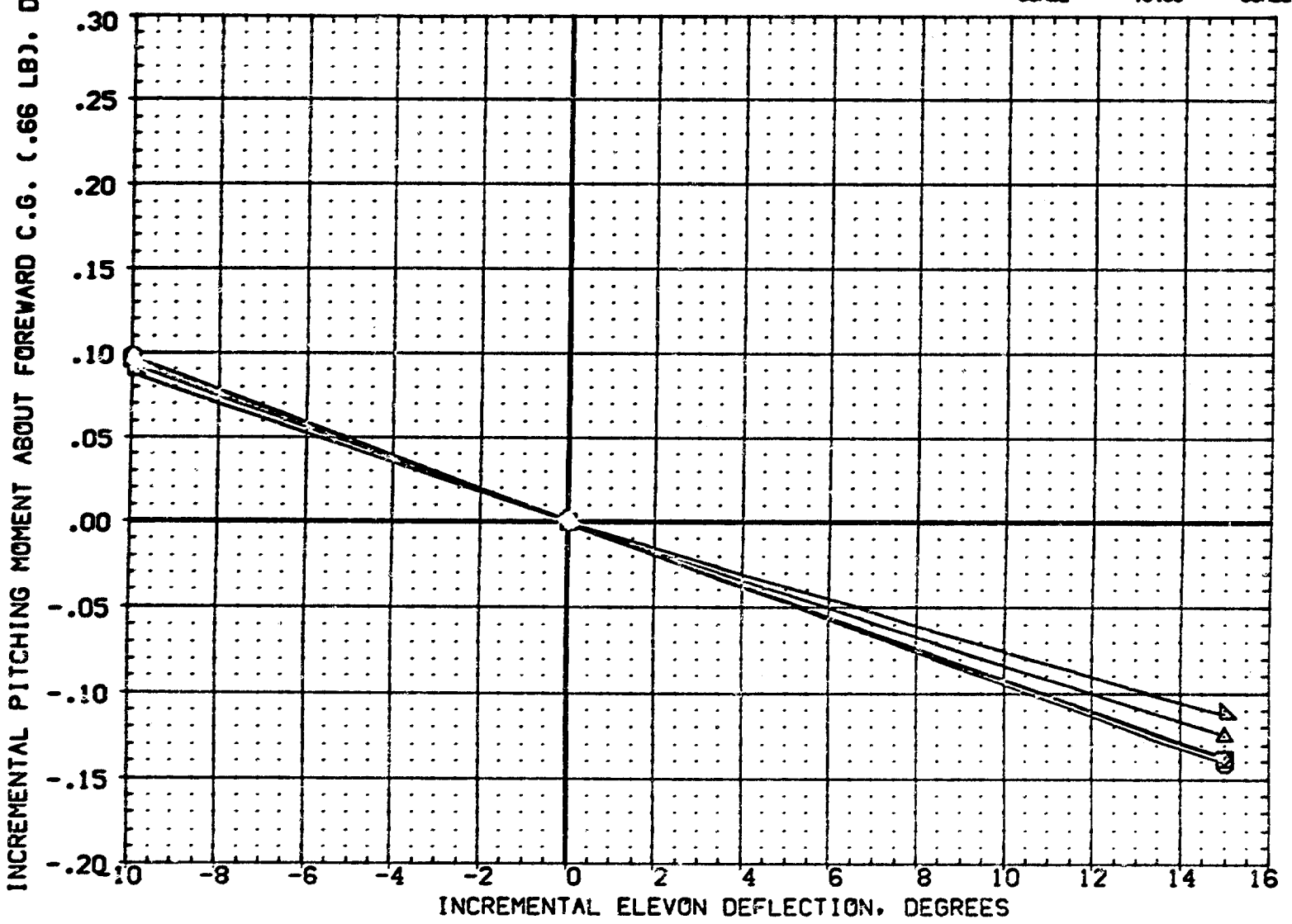


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

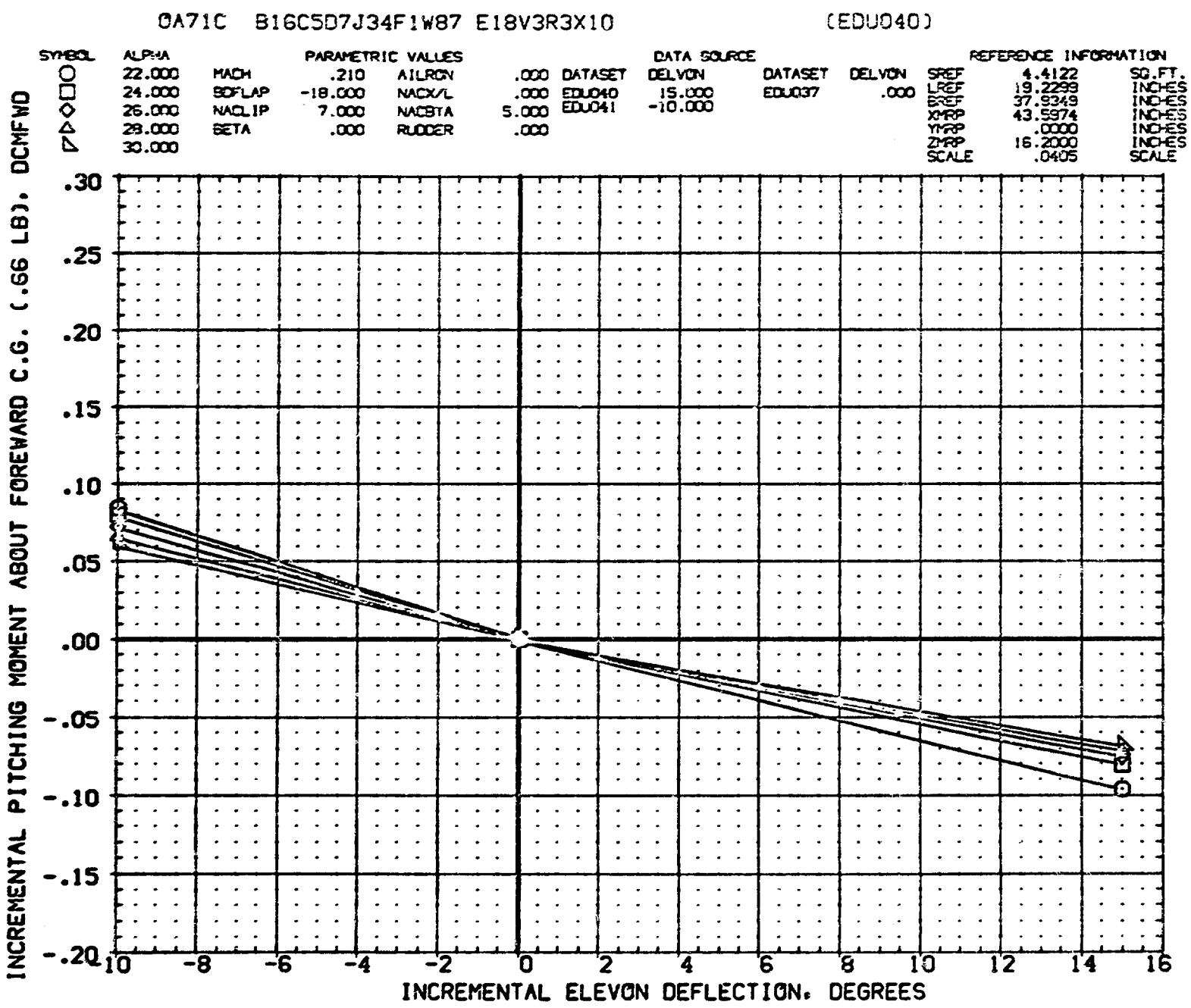


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

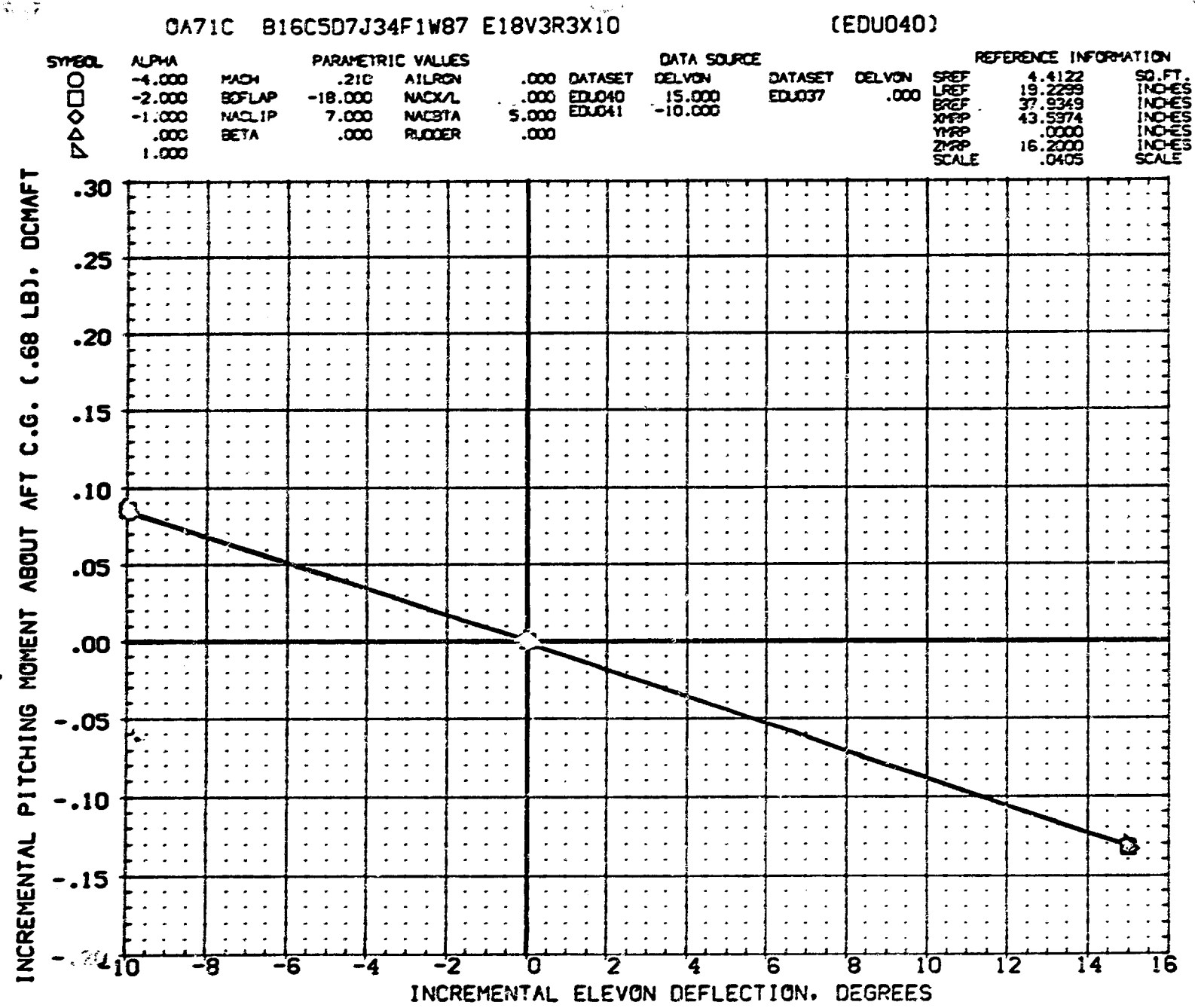


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	2.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	4.000	BDFLAP	-18.000	NACX/L	.000	EDU040	15.000	EDU037	.000	LREF	19.2239	INCHES
◇	6.000	NACLIP	7.000	NACBTA	5.000	EDU041	-10.000			BREF	37.9349	INCHES
△	8.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	10.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

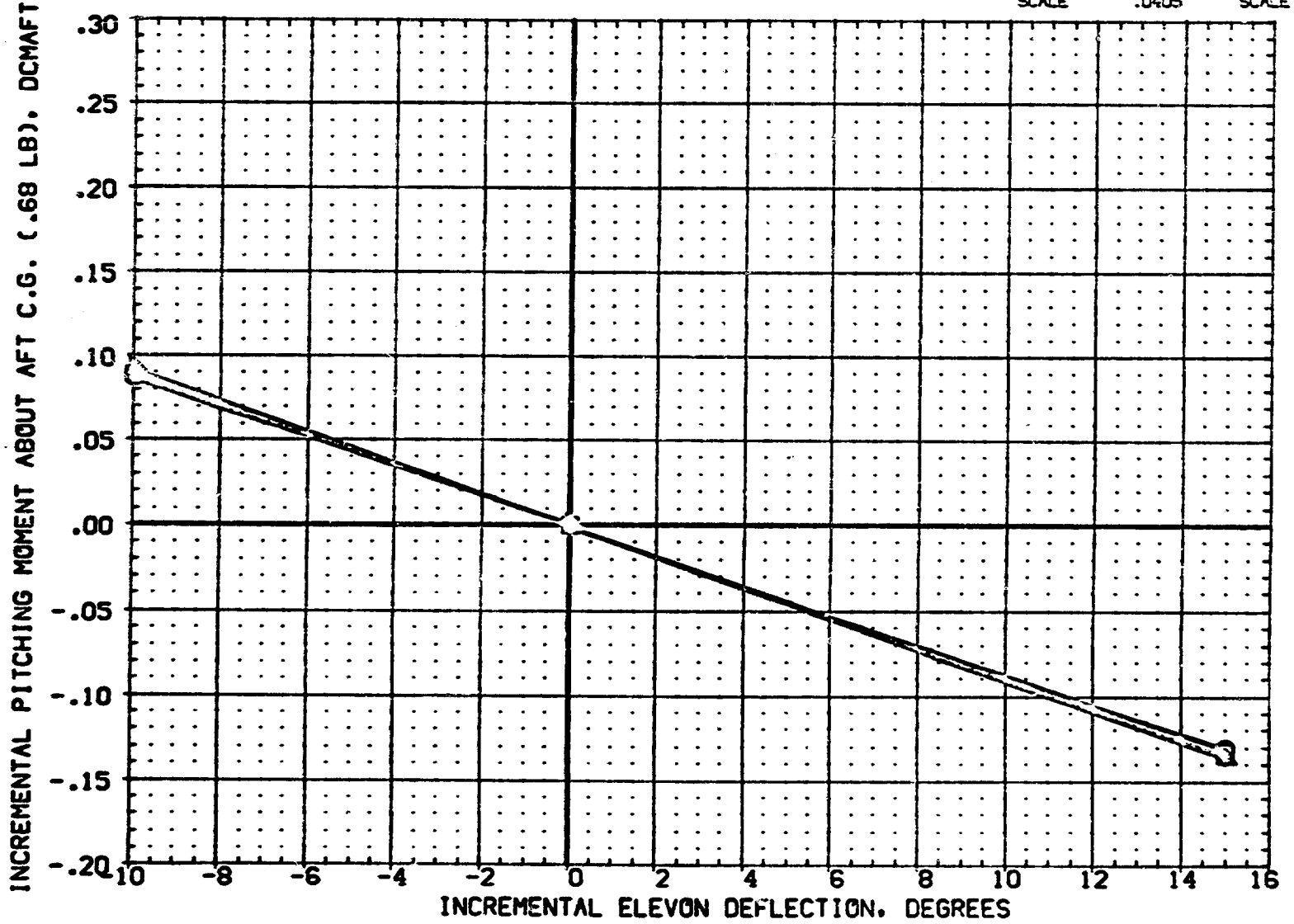


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

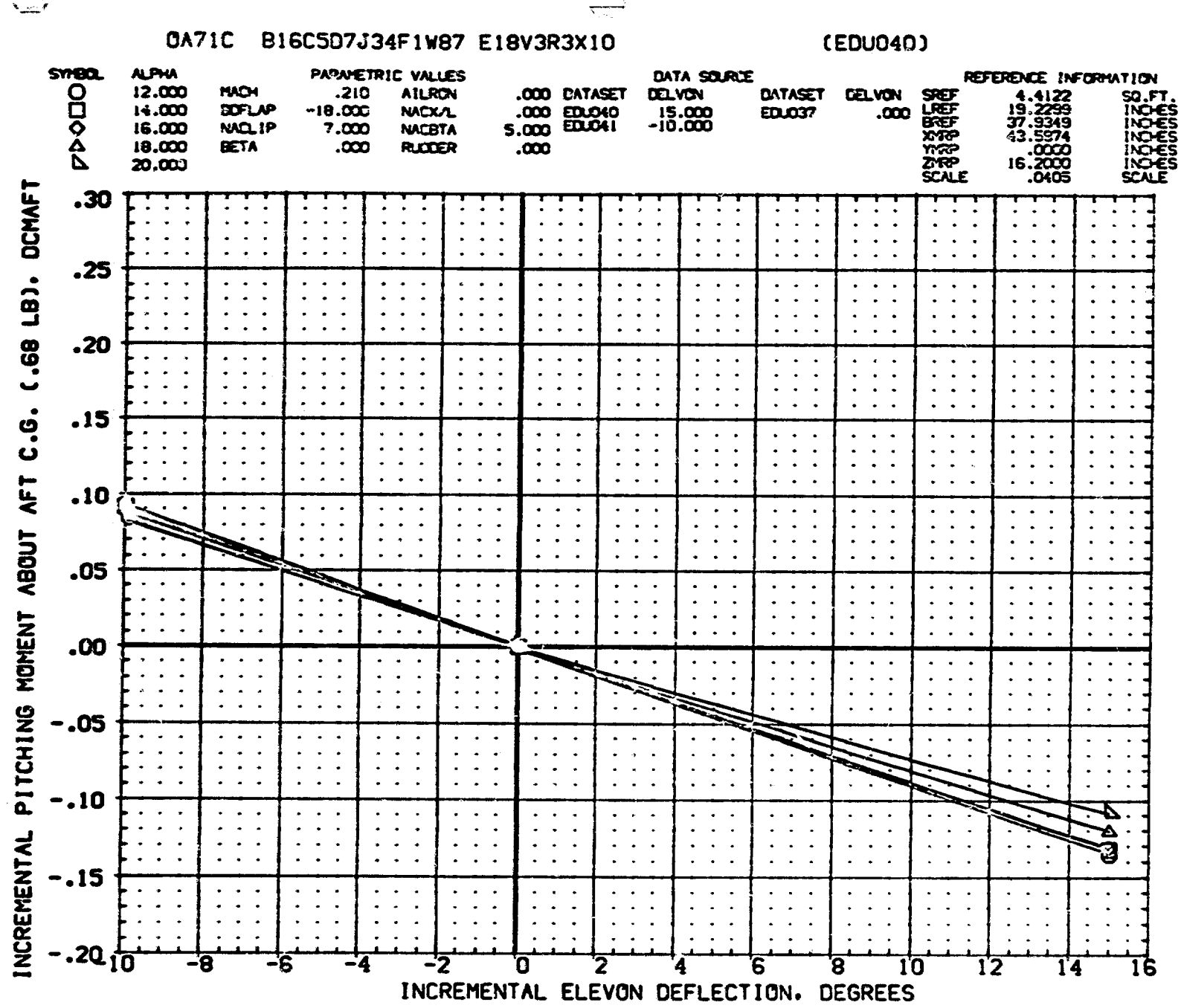


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XC= 950

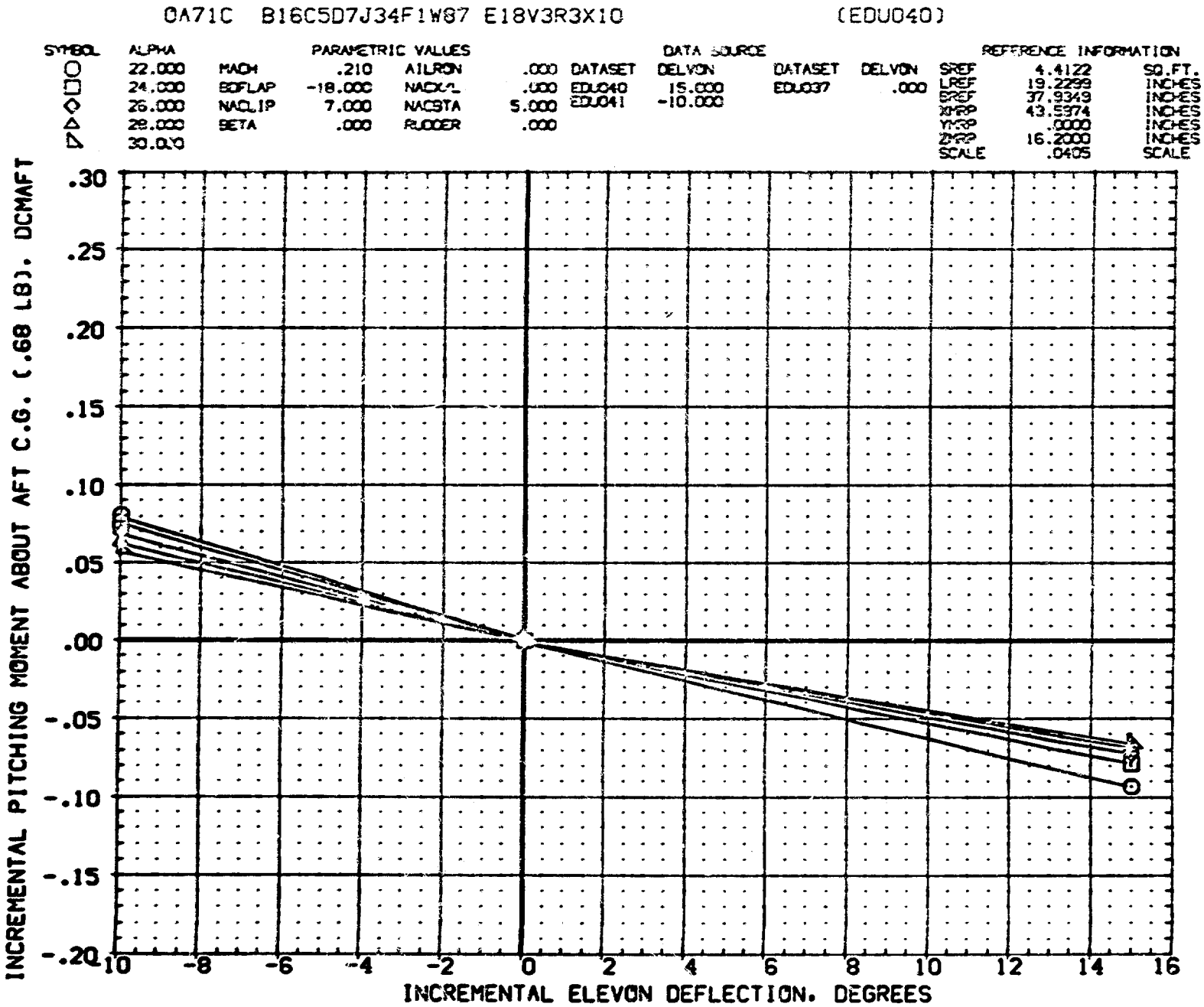


FIG 7 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 950

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU045)	○	OA71C B16CSD7J34F1V87 E18V3R3X10	15.000	.270	7.000	5.000
(ADU046)	□	OA71C B16CSD7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(ADU044)	◇	OA71C B16CSD7J34F1V87 E18V3R3X10	-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

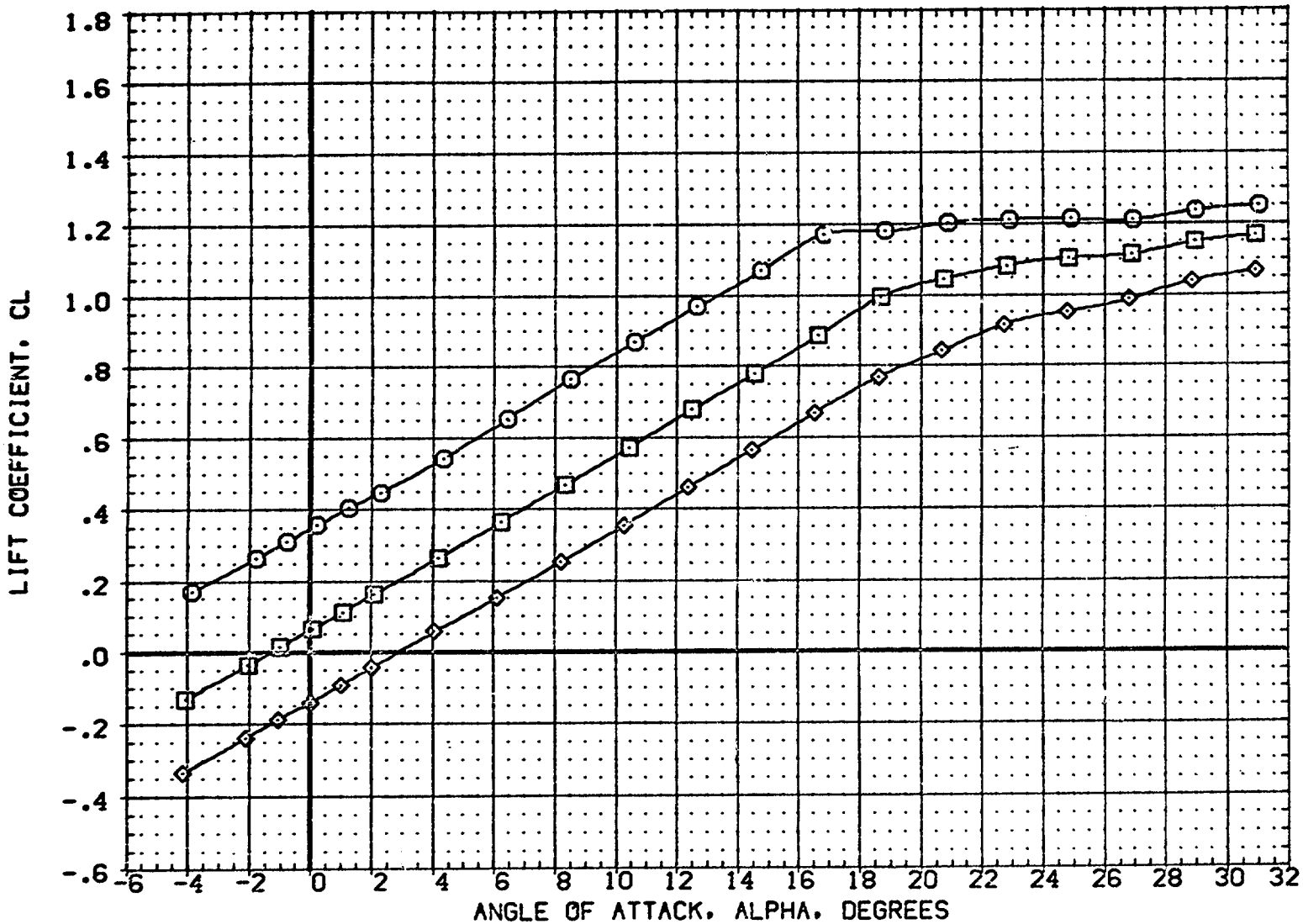


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1005

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADJ045)	□	CA71C B16CSD7J34F1V87 E18V3R3X10	15.000	.270	7.000	-5.000
(ADJ046)	○	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(ADJ044)	◇	CA71C B16CSD7J34F1V87 E18V3R3X10	-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2293	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

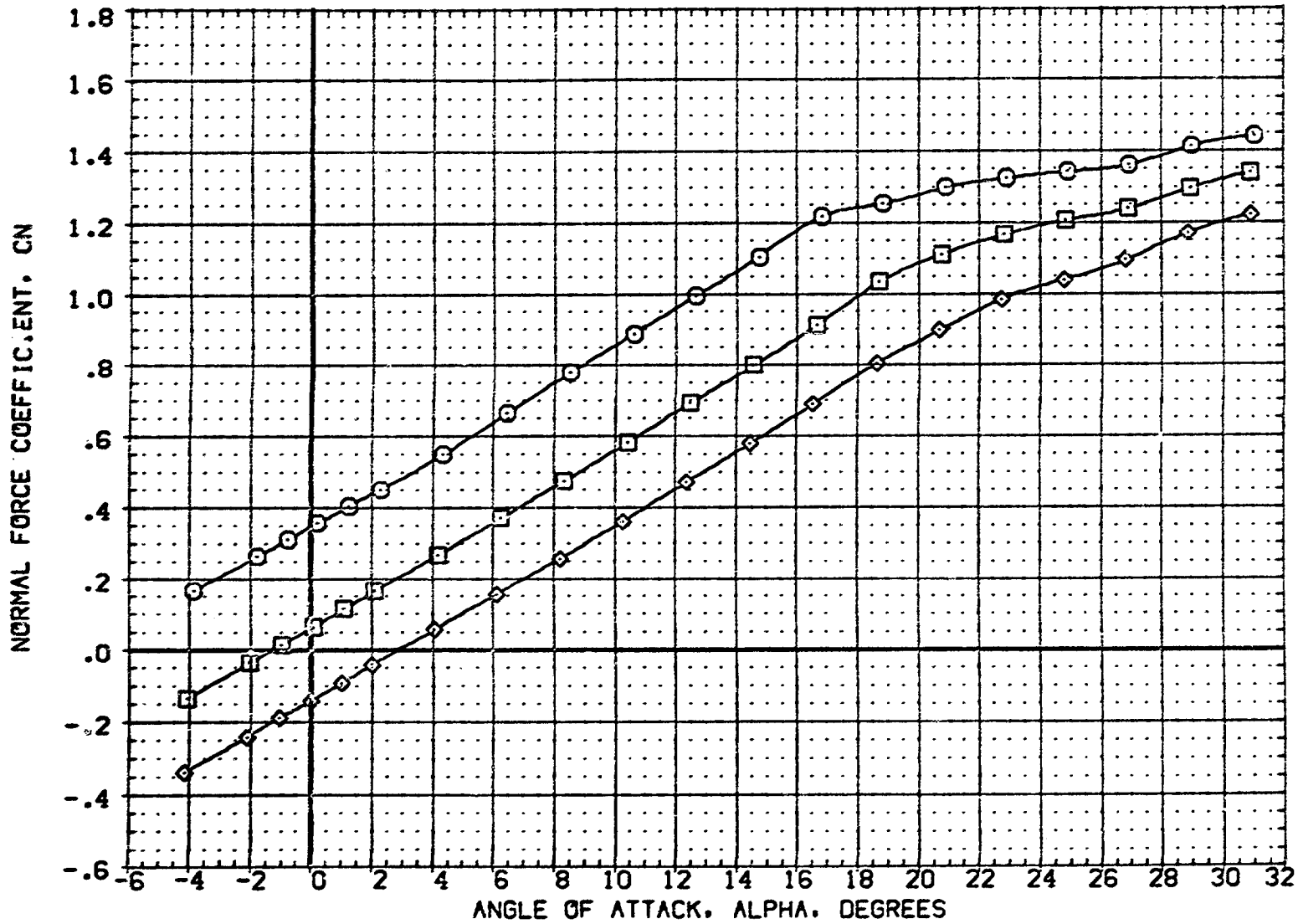


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1005

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ADJ045)	CA71C B16C507J34F1V87 E18V3R3X10
(ADJ045)	CA71C B16C507J34F1V87 E18V3R3X10
(ADJ044)	CA71C B16C507J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.270	7.000	5.000
.000	.270	7.000	5.000
-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

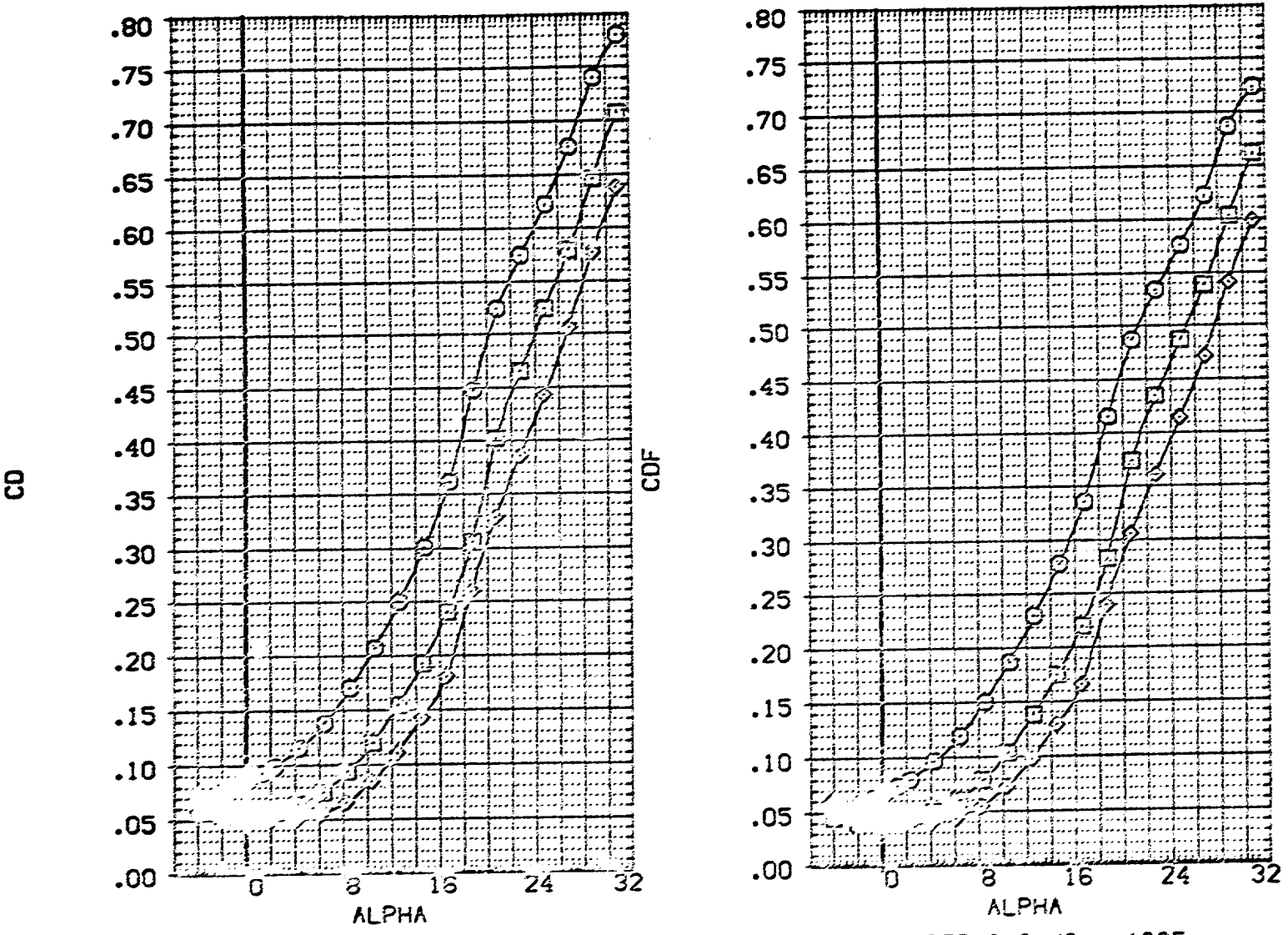


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1005

(A)MACH = .20

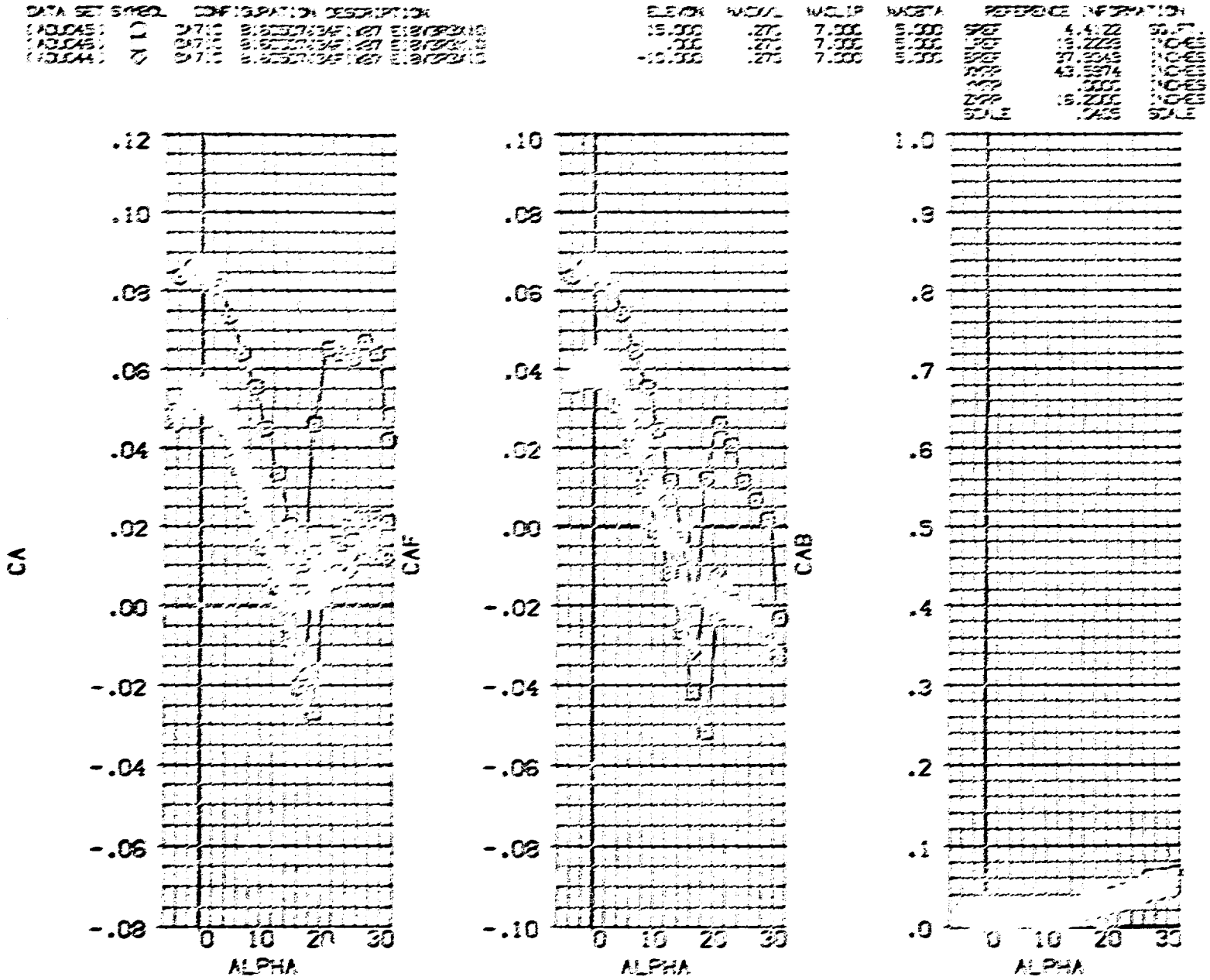


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1005

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ADU045)	○	DA7IC B16C507J34F1V87 E18V3R3X10
(ADU046)	□	DA7IC B16C507J34F1V87 E18V3R3X10
(ADU044)	◇	DA7IC B16C507J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	N:CBTA
15.000	.270	7.000	5.000
.000	.270	7.000	5.000
-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

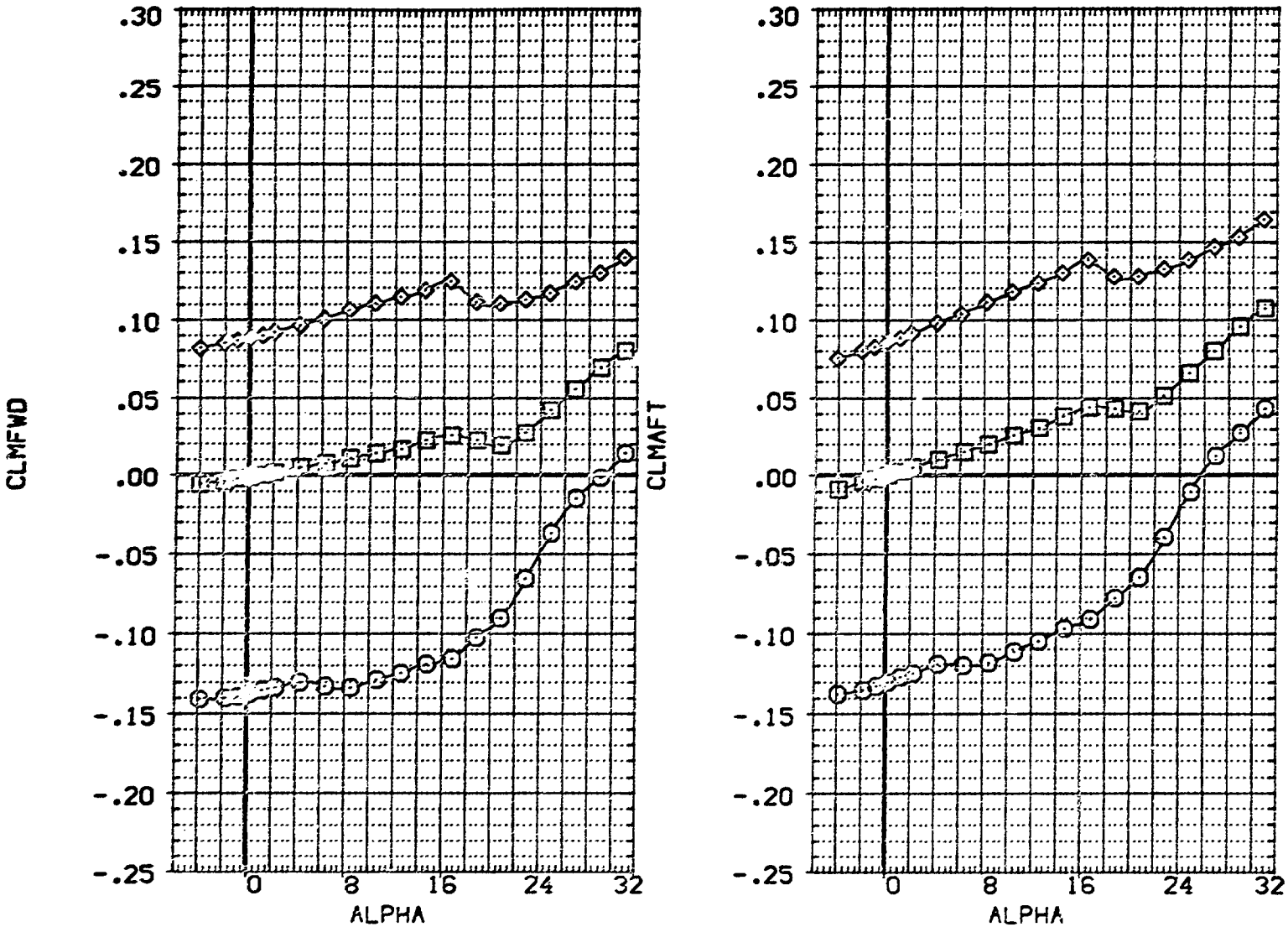


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1005

(A)MACH = .20

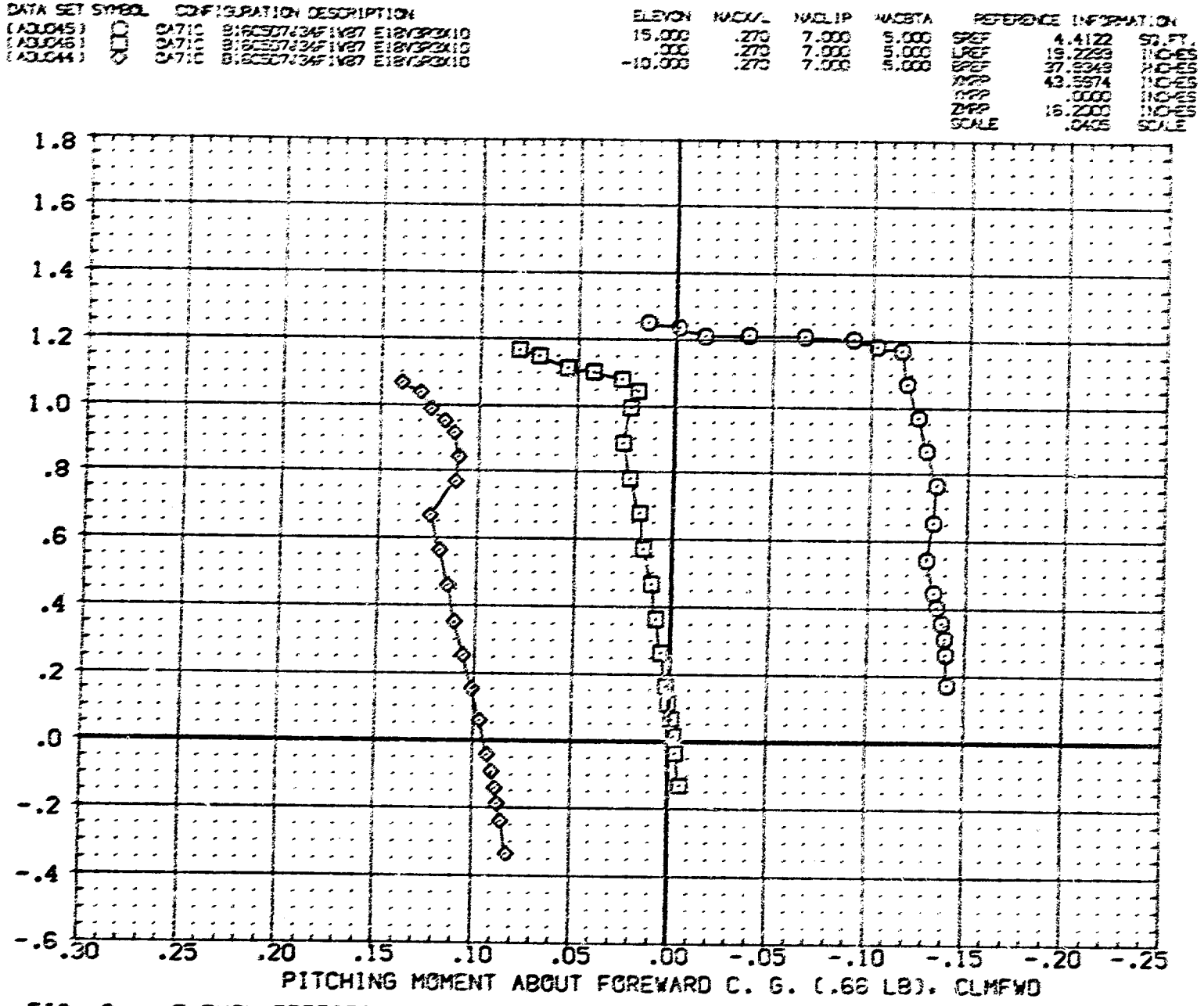


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1005

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACXL	NACLIP	NACBTA
(ADJCA5)	□	CA71C B1SC5D7G34F1V87 E1BV2D2X10	15.000	.270	7.000	5.000
(ADJCA5)	◇	CA71C B1SC5D7G34F1V87 E1BV2D2X10	.000	.270	7.000	5.000
(ADJCA4)	○	CA71C B1SC5D7G34F1V87 E1BV2D2X10	-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2200	INCHES
SCALE	.0405	SCALE

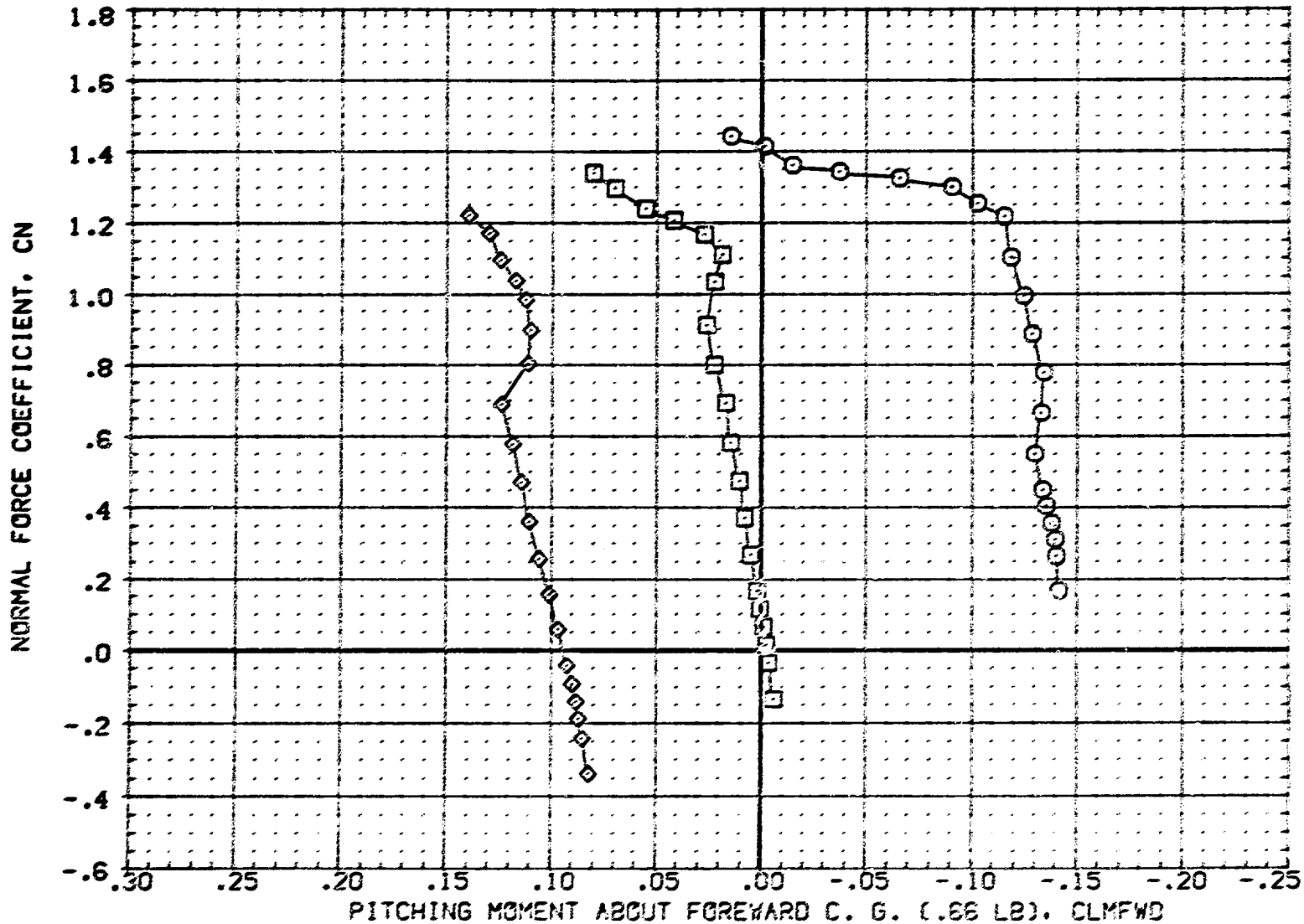


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1005

(A)MACH = .20

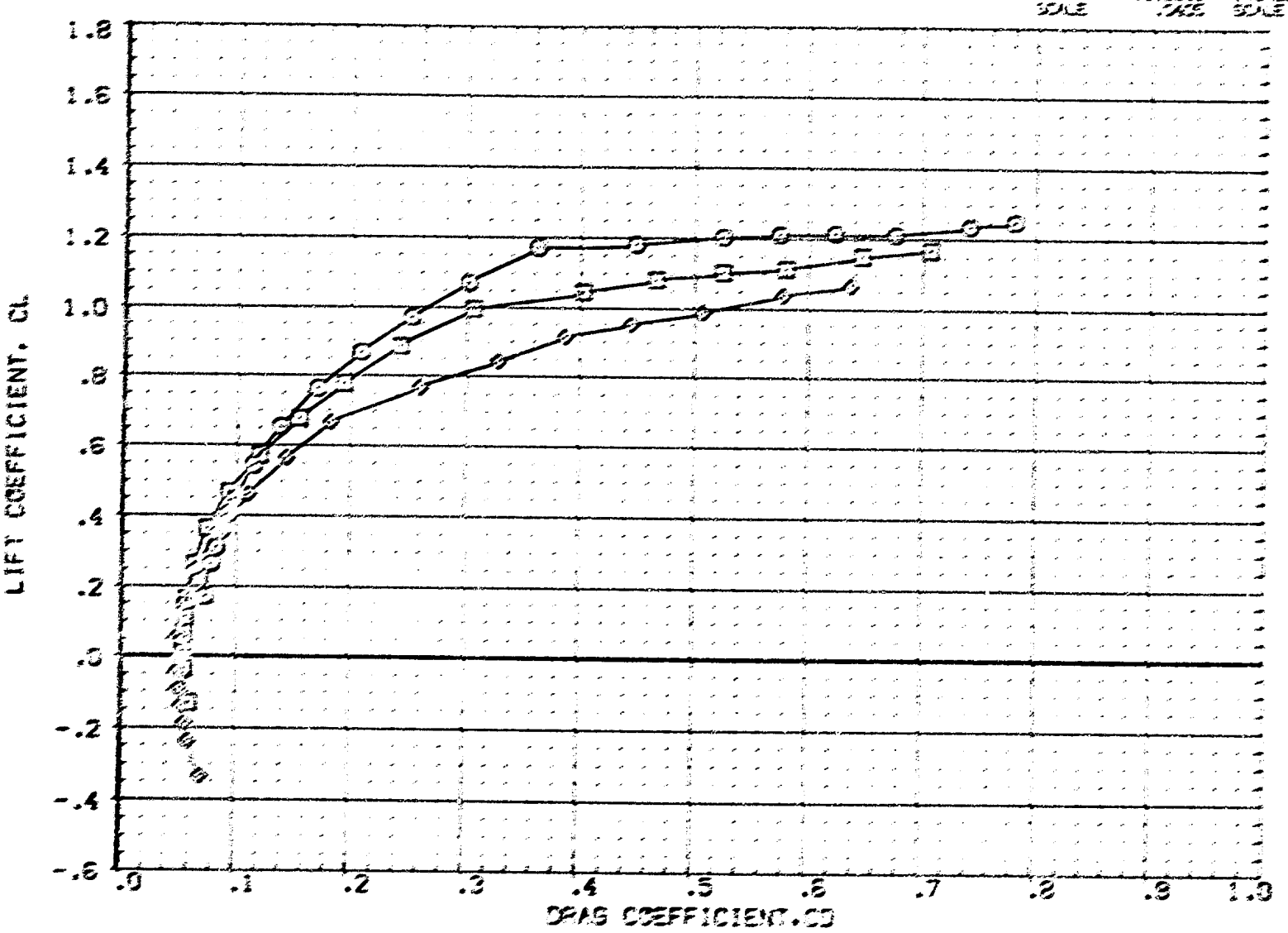


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNCERTAINTY (D = 100%

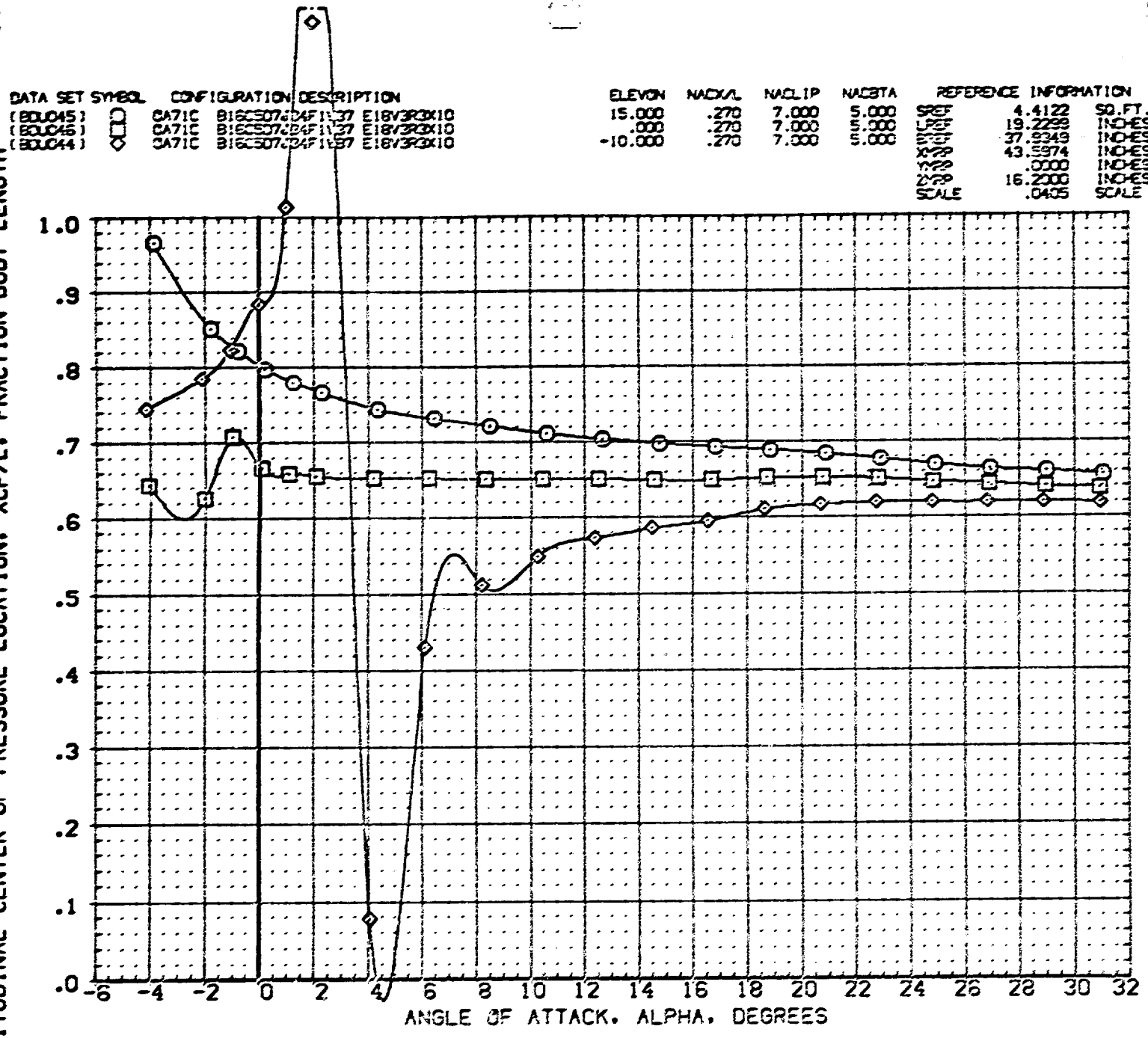


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1005

(A)MACH = .20

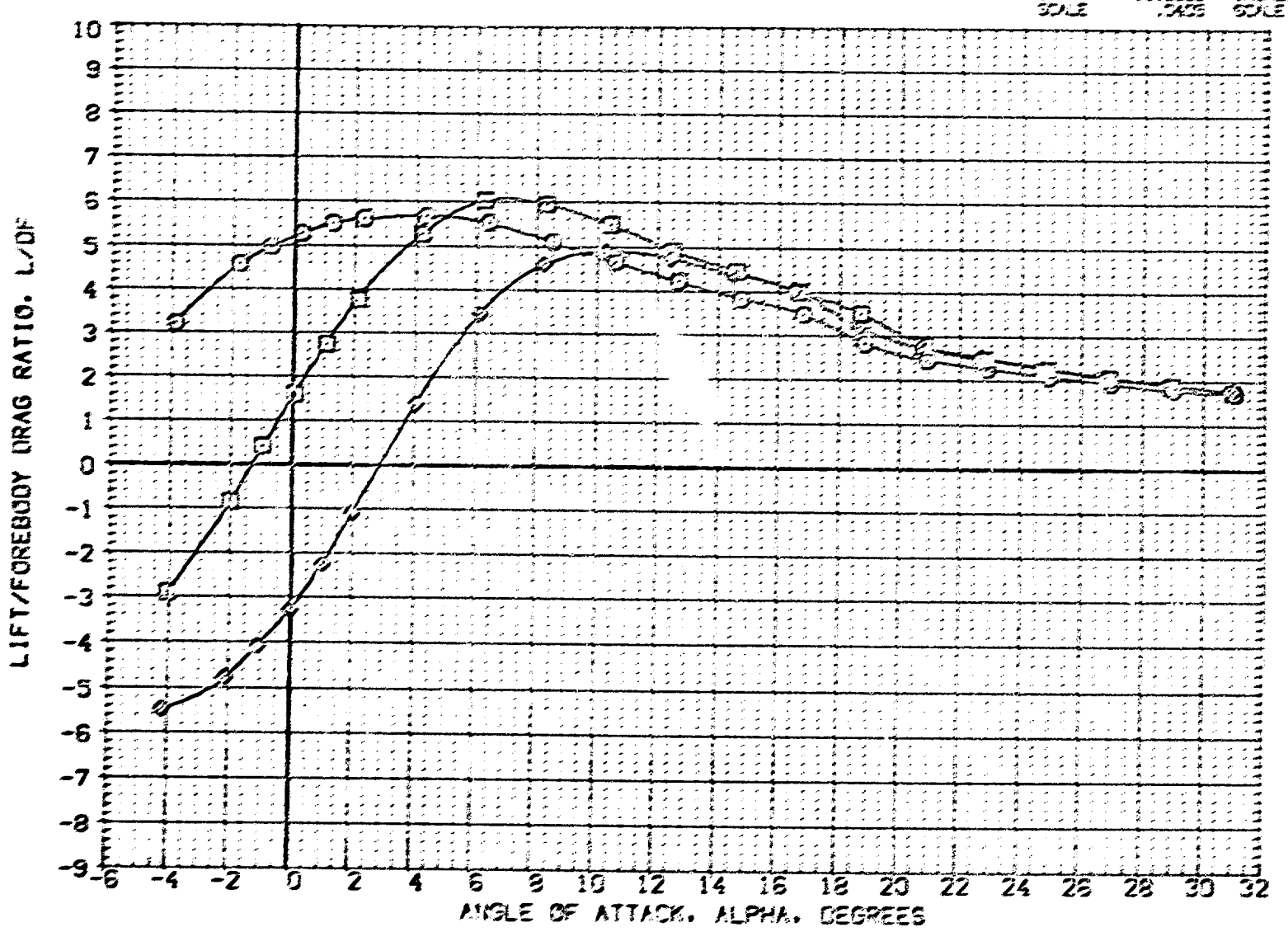


FIG 8 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XC = 1005

(A) MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(EDU045)	□	24/10 B:SCS07/34F/W27 E:BWB2X10
(EDU046)	◇	24/10 B:SCS07/34F/W27 E:BWB2X11
(EDU044)	▽	24/10 B:SCS07/34F/W27 E:BWB2X10

DELVON	NACYA	NACLIP	NACBTA
15.000	.270	7.000	5.000
.000	.270	7.000	5.000
-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	13.2283	INCHES
BREF	37.9343	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	15.2000	INCHES
SCALE	.0625	SCALE

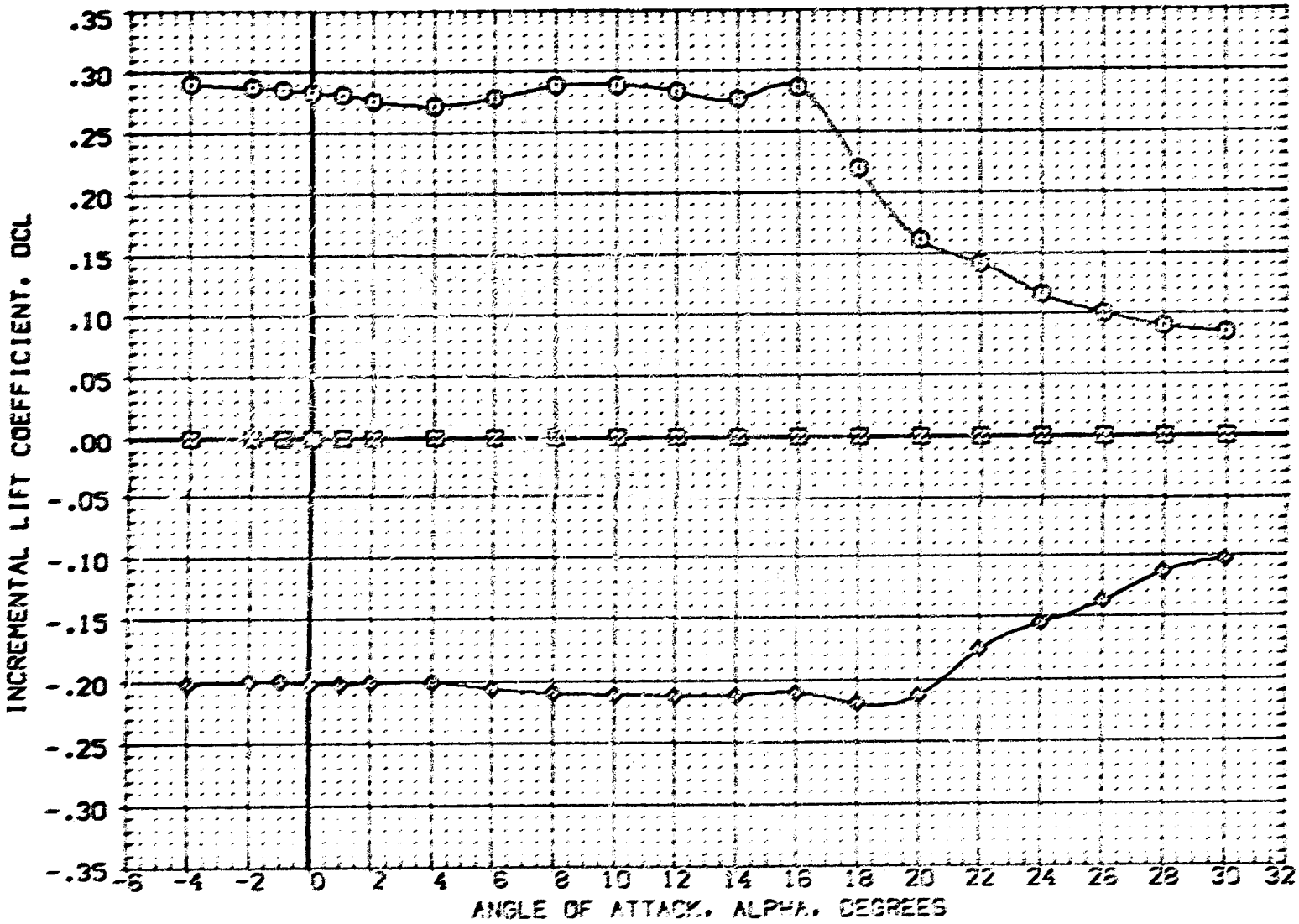


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XC= 1005

CA)MACH = .2:

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(EDU045) ○	CA71C B16CS07J34F1V87 E18V3R3X10
(EDU046) □	CA71C B16CS07J34F1V87 E18V3R3X10
(EDU044) ◇	CA71C B16CS07J34F1V87 E18V3R3X10

DELVON	NACX/L	NACLIP	NACBTA
15.000	.270	7.000	5.000
.000	.270	7.000	5.000
-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

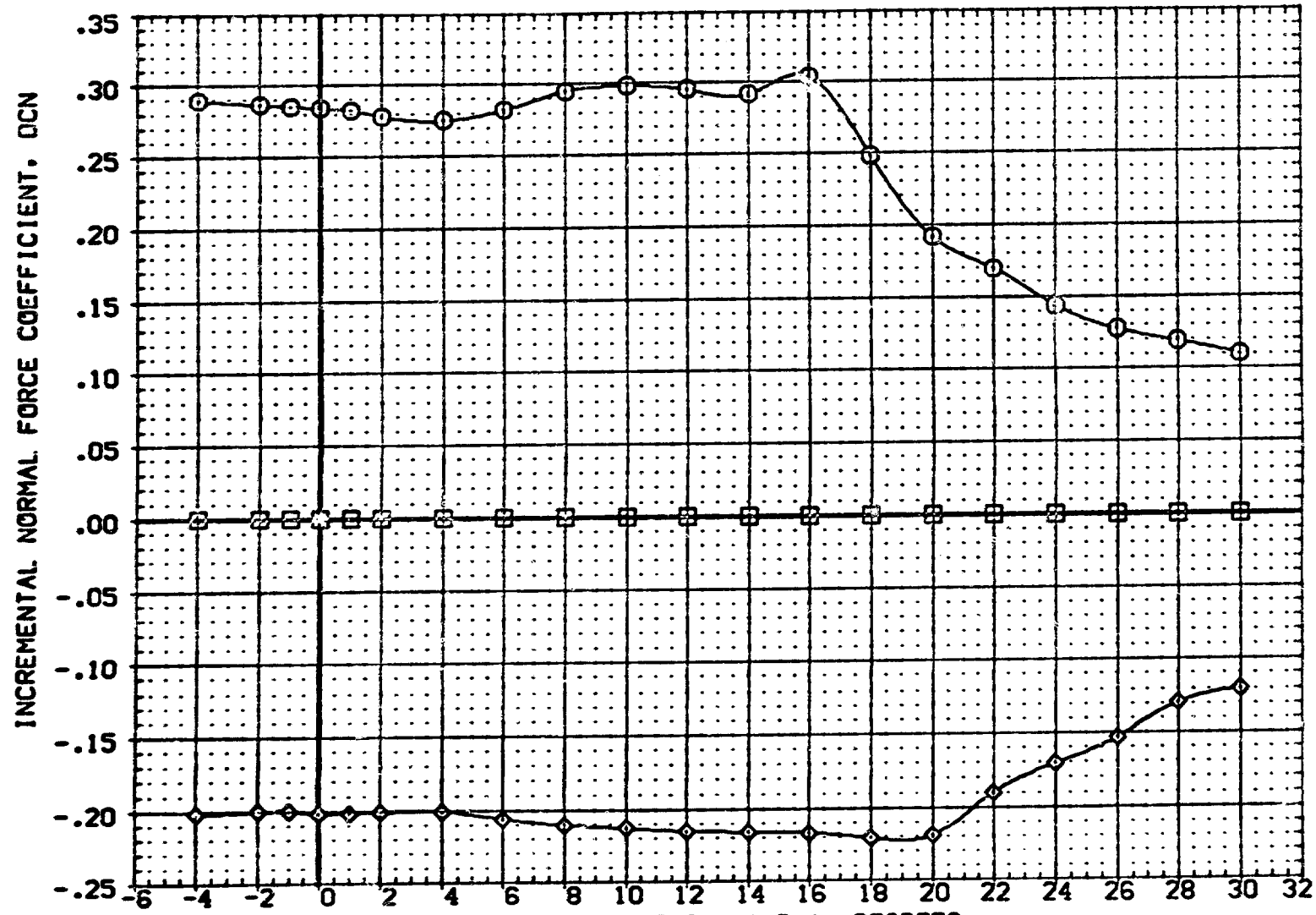


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

(A)MACH = .21

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(EDU045)	○	CA71C B16CS07J34F1V87 E18V3R3X10
(EDU046)	□	CA71C B16CS07J34F1V87 E18V3R3X10
(EDU044)	◇	CA71C B16CS07J34F1V87 E18V3R3X10

DELVON	NACX/L	NACLIP	NACBTA
15.000	.270	7.000	5.000
.000	.270	7.000	5.000
-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

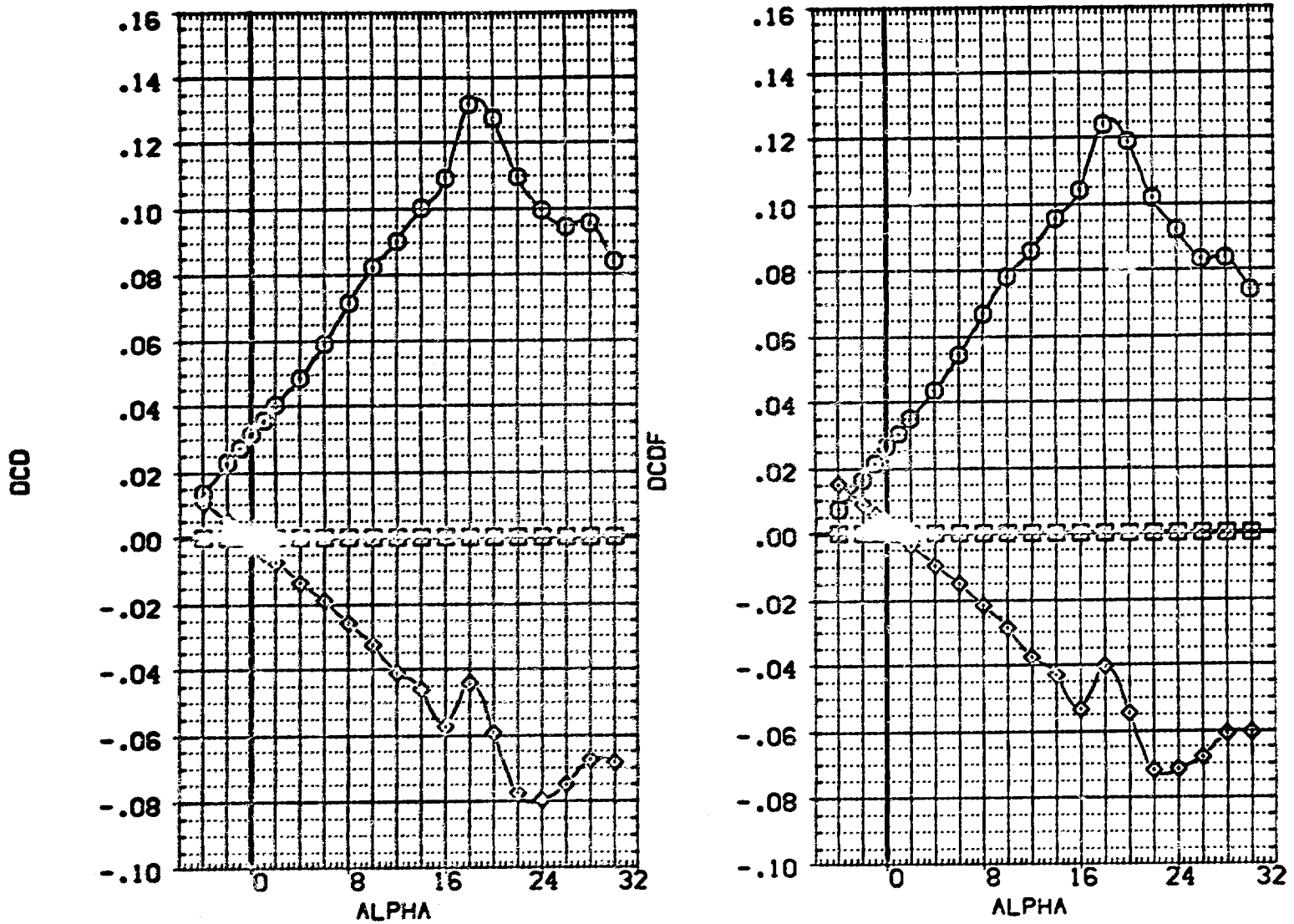


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

(A)MACH = .21

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(EDU045)	○	DA71C B16CSD7J34F1V87 E18V3R3X10
(EDU046)	□	DA71C B16CSD7J34F1V87 E18V3R3X10
(EDU044)	◇	DA71C B16CSD7J34F1V87 E18V3R3X10

DELVON	NACX/L	NACLIP	NACBTA
15.000	.270	7.000	5.000
.000	.270	7.000	5.000
-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

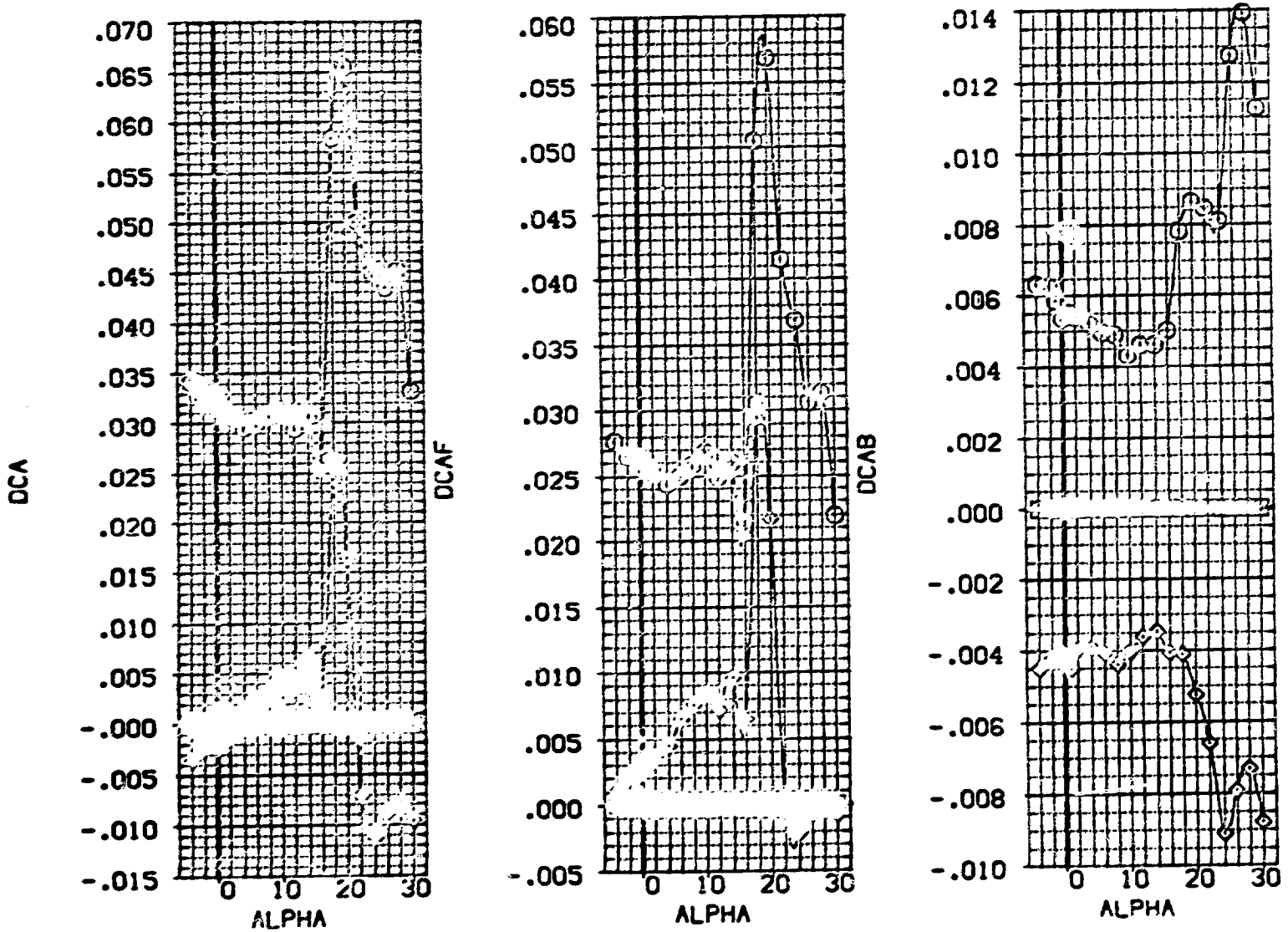


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

(A)MACH = .21

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(EDU045)	○	DA71C B16C507J34F1V87 E18V3R3X10
(EDU046)	□	DA71C B16C507J34F1V87 E18V3R3X10
(EDU044)	◇	DA71C B16C507J34F1V87 E18V3R3X10

DELVON	NACX/L	NACLIP	NACBTA
15.000	.270	7.000	5.000
.000	.270	7.000	5.000
-10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

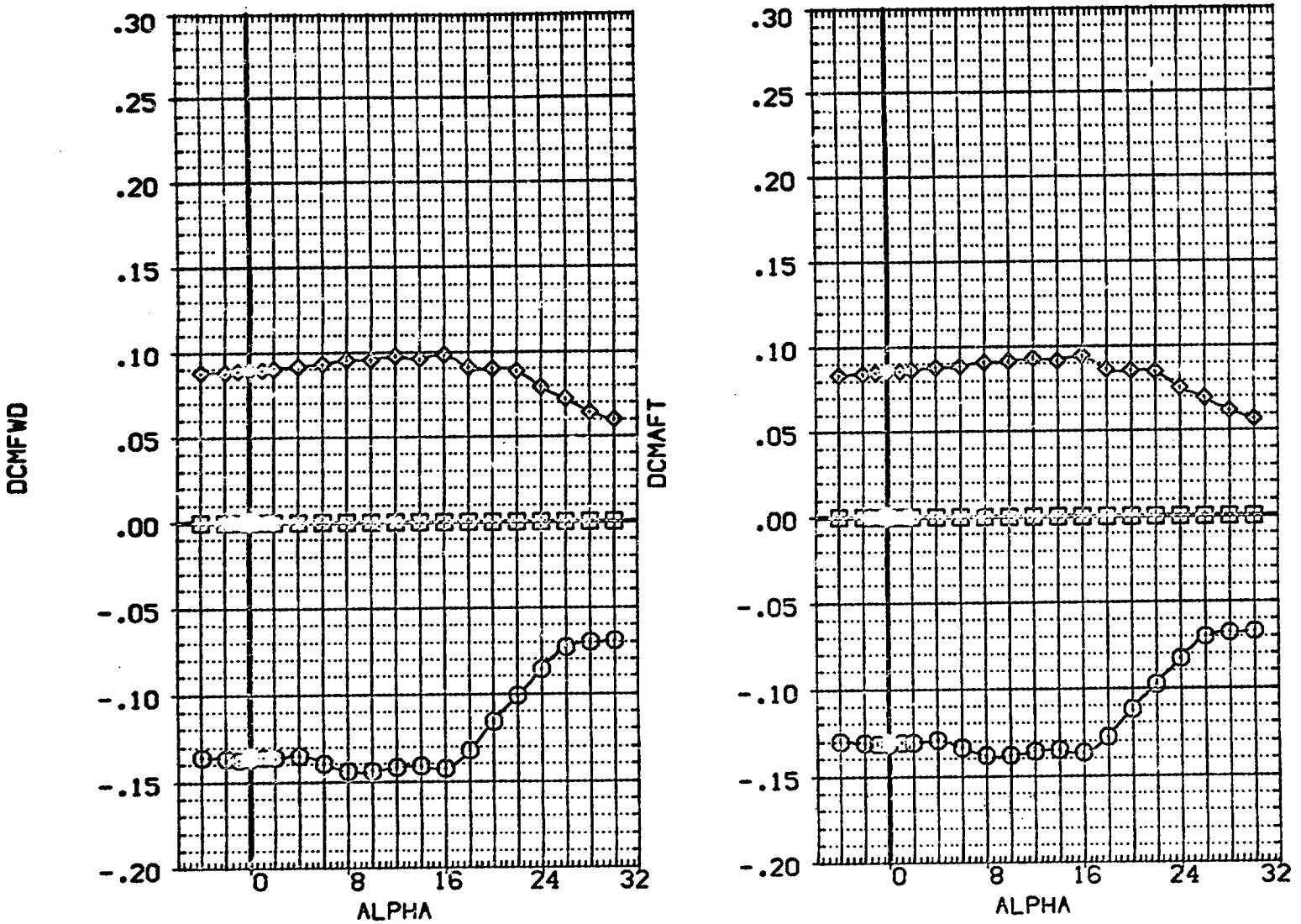


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

(A)MACH = .21

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BOFLAP	-18.000	NACX/L	.270	EDU045	15.000	EDU046	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU044	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

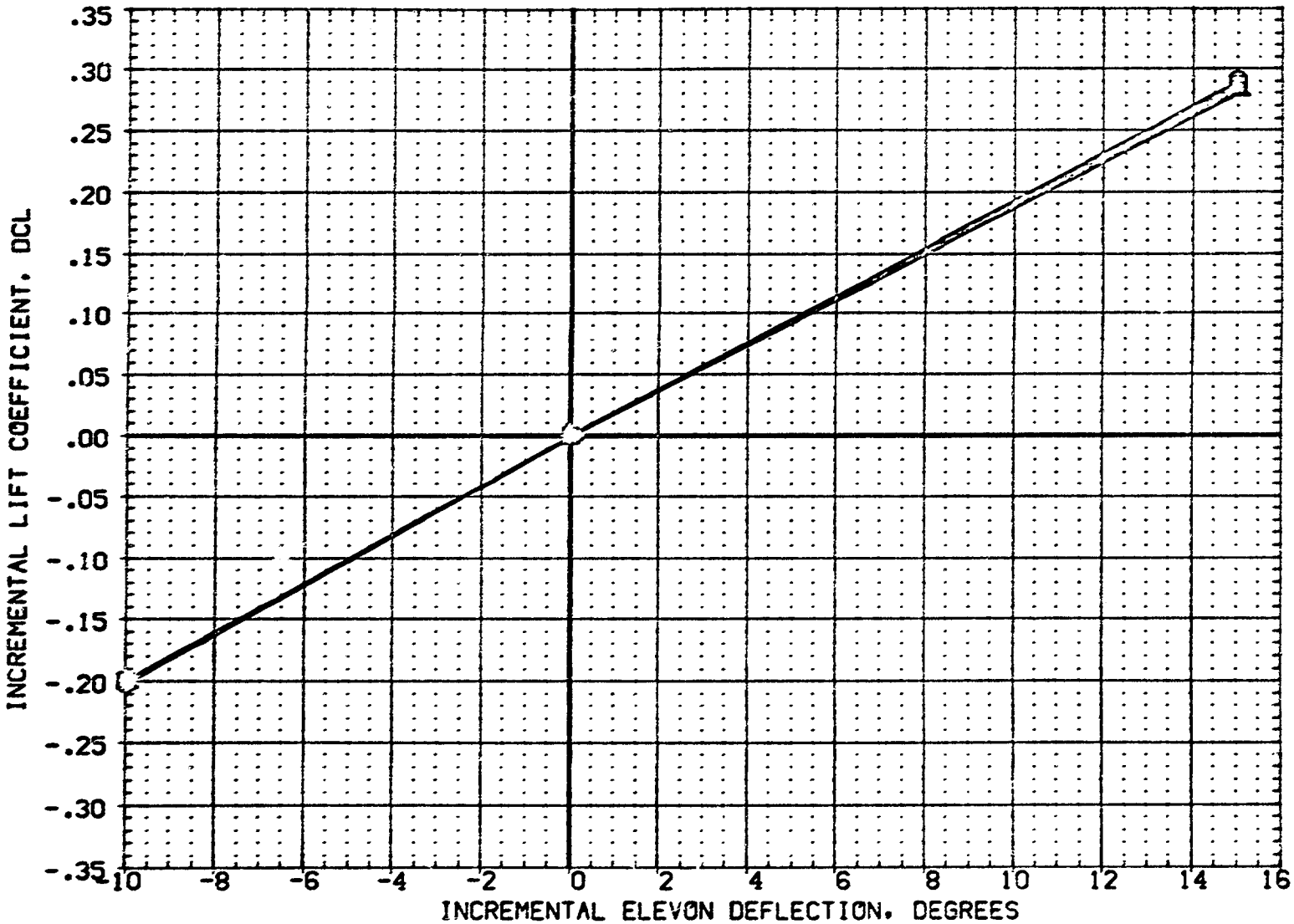


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU045)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	2.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	4.000	BOFLAP	-18.000	NACX/L	.270	EDU045	15.000	EDU046	.000	LREF	19.2299	INCHES
◇	6.000	NACLIP	7.000	NACBTA	5.000	EDU044	-10.000			BREF	37.9349	INCHES
△	8.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
◁	10.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

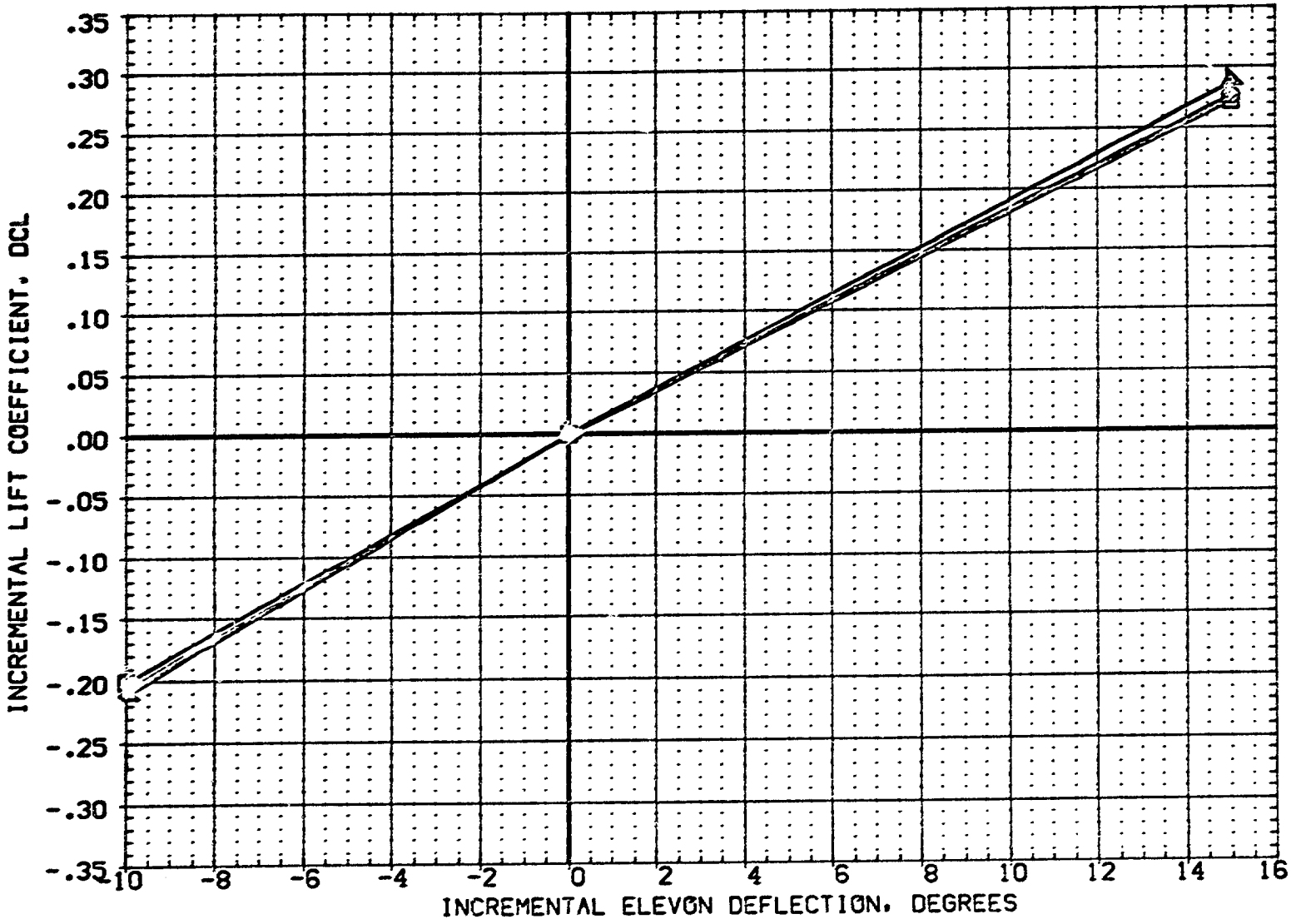


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

0A71C B1EC5D7J34F1W87 E18V3R3X10 (EDU045)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	BOFLAP	-18.000	NACX/L	.270	EDU045	15.000	EDU046	.000	LREF	19.2299	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU044	-10.000			BREF	37.9349	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
◺	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

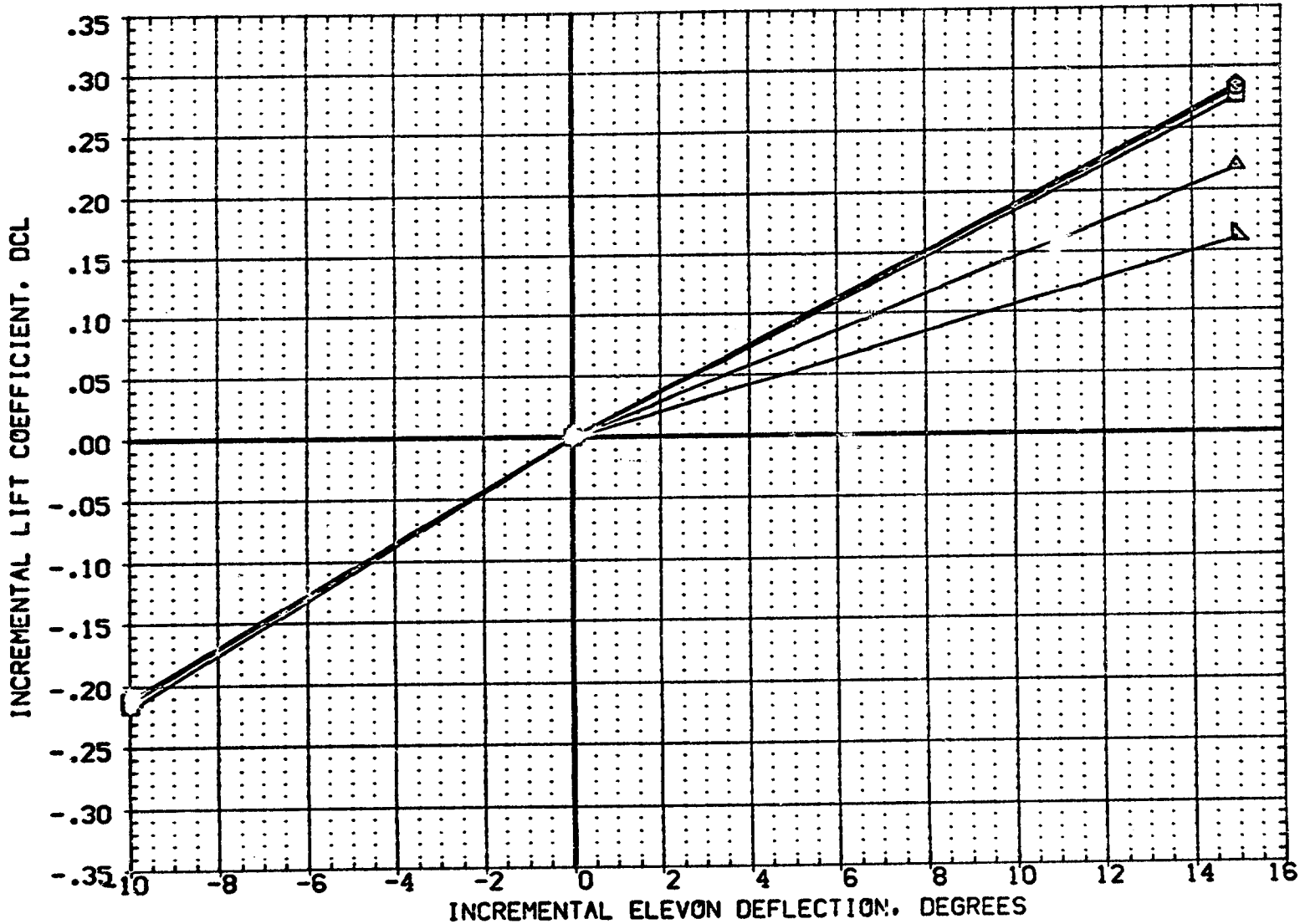


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

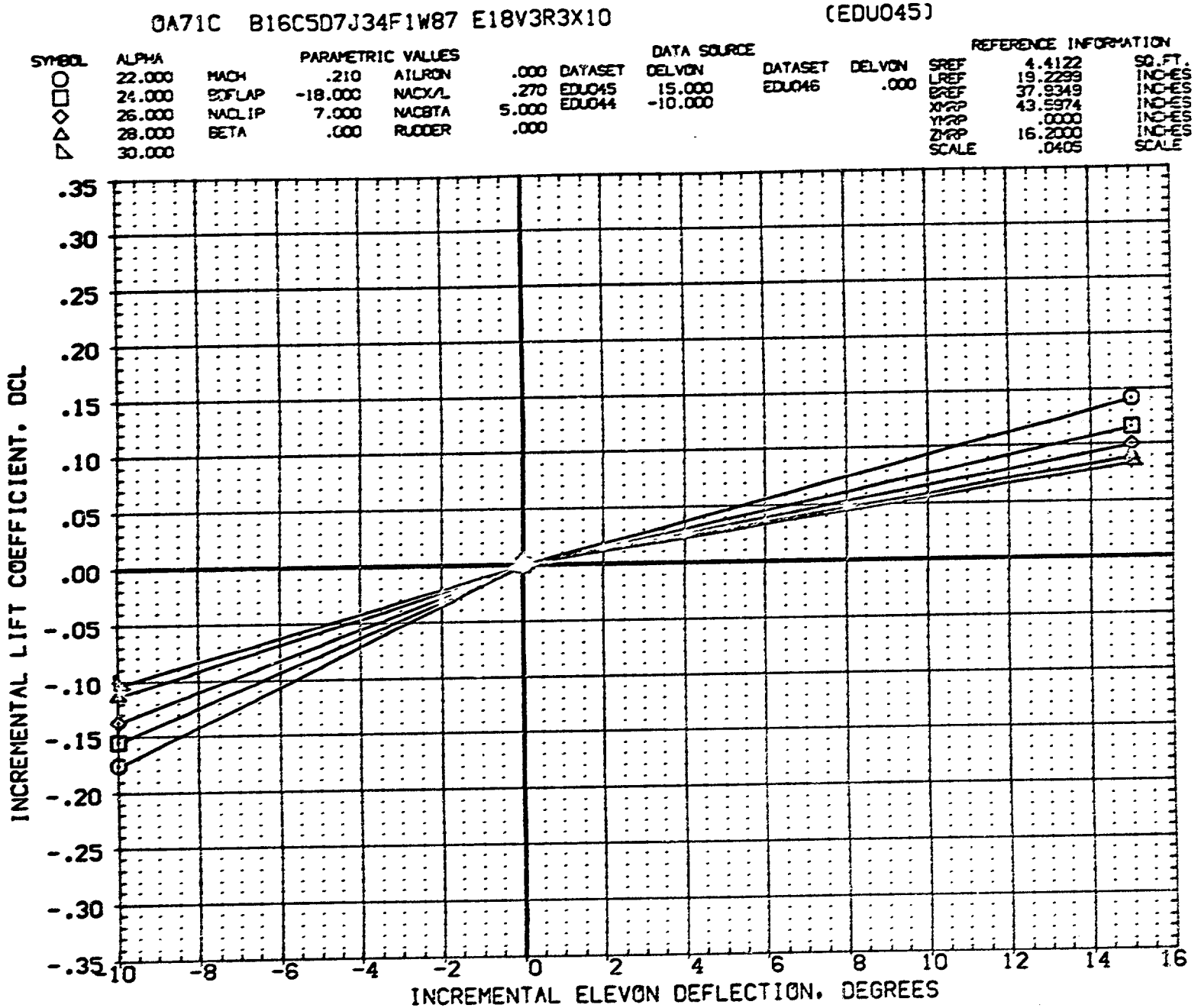


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BDFLAP	-18.000	NACX/L	.270	EDU045	15.000	EDU046	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU044	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

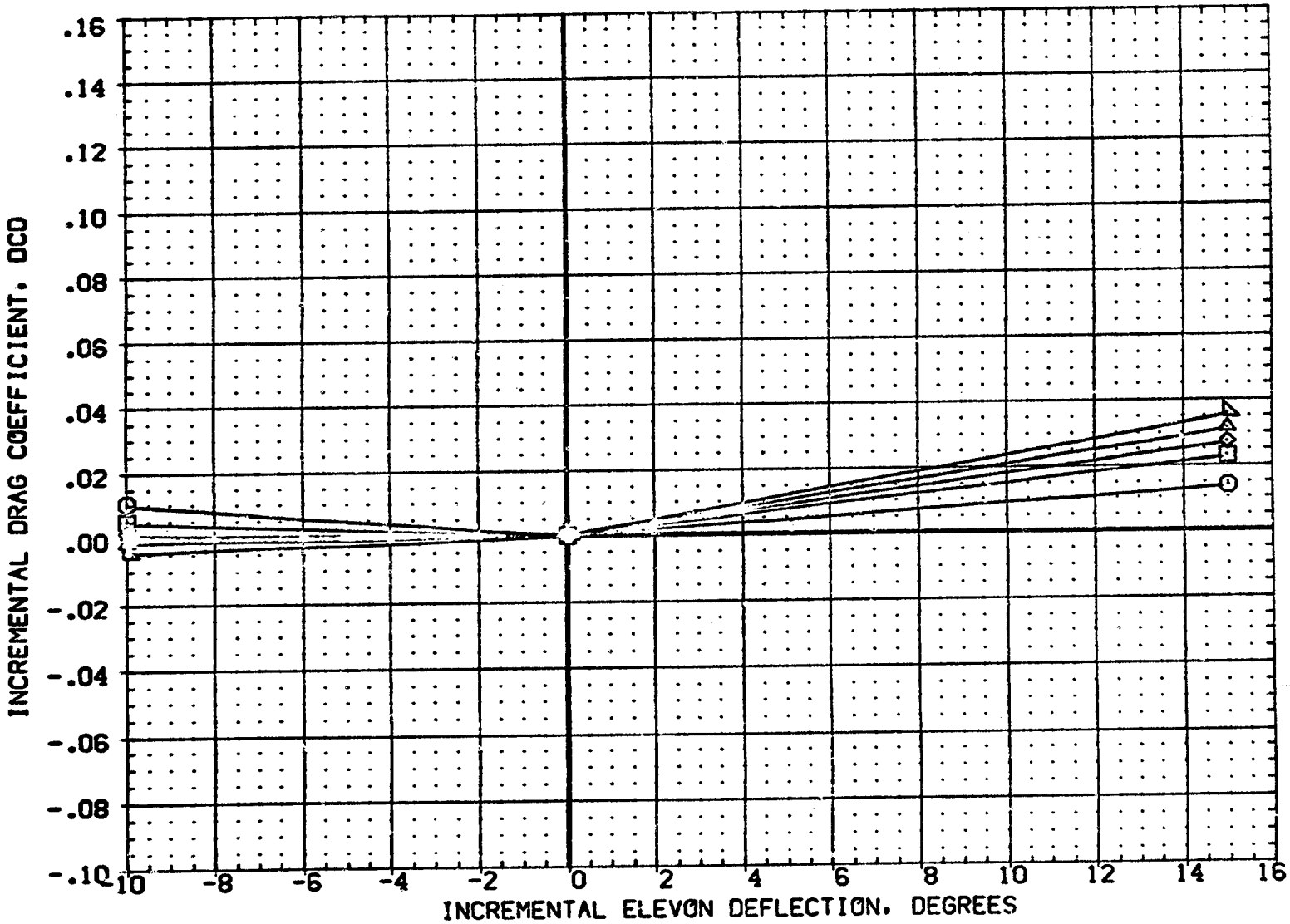


FIG- 9 -INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

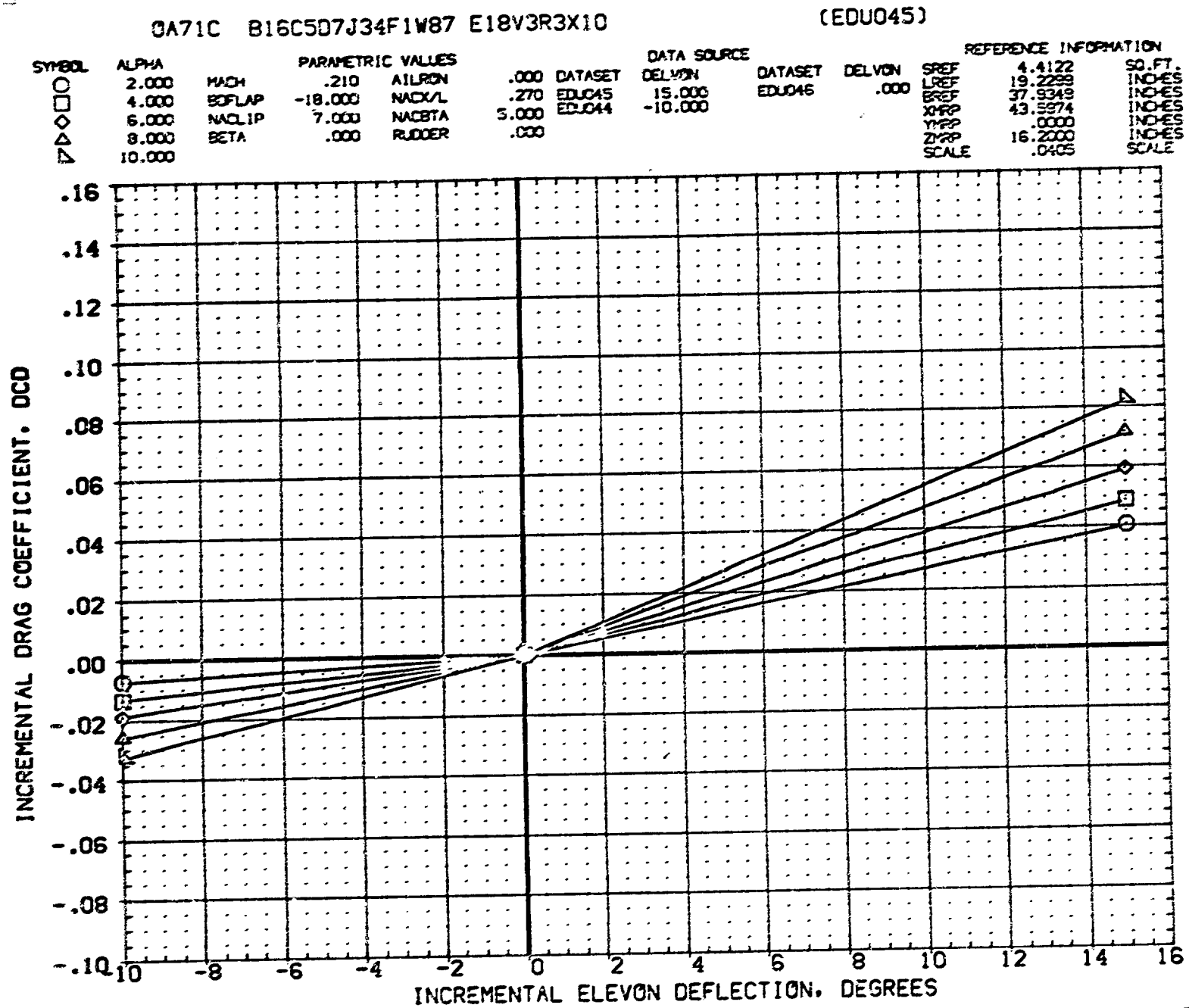


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	BOFLAP	-18.000	NACXL	.270	EDU045	15.000	EDU045	.000	LREF	19.2269	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU044	-10.000			BREF	37.9345	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

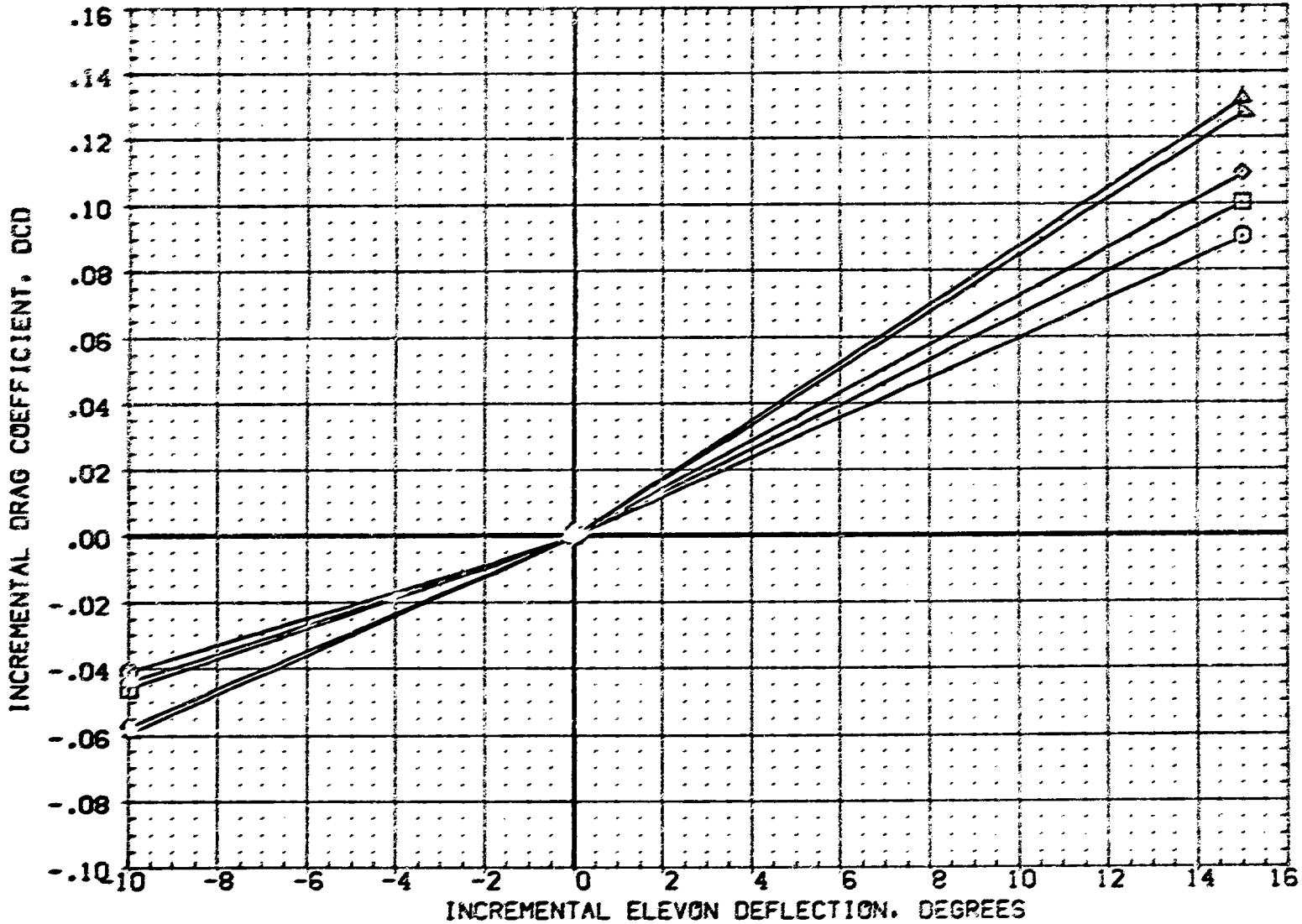


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

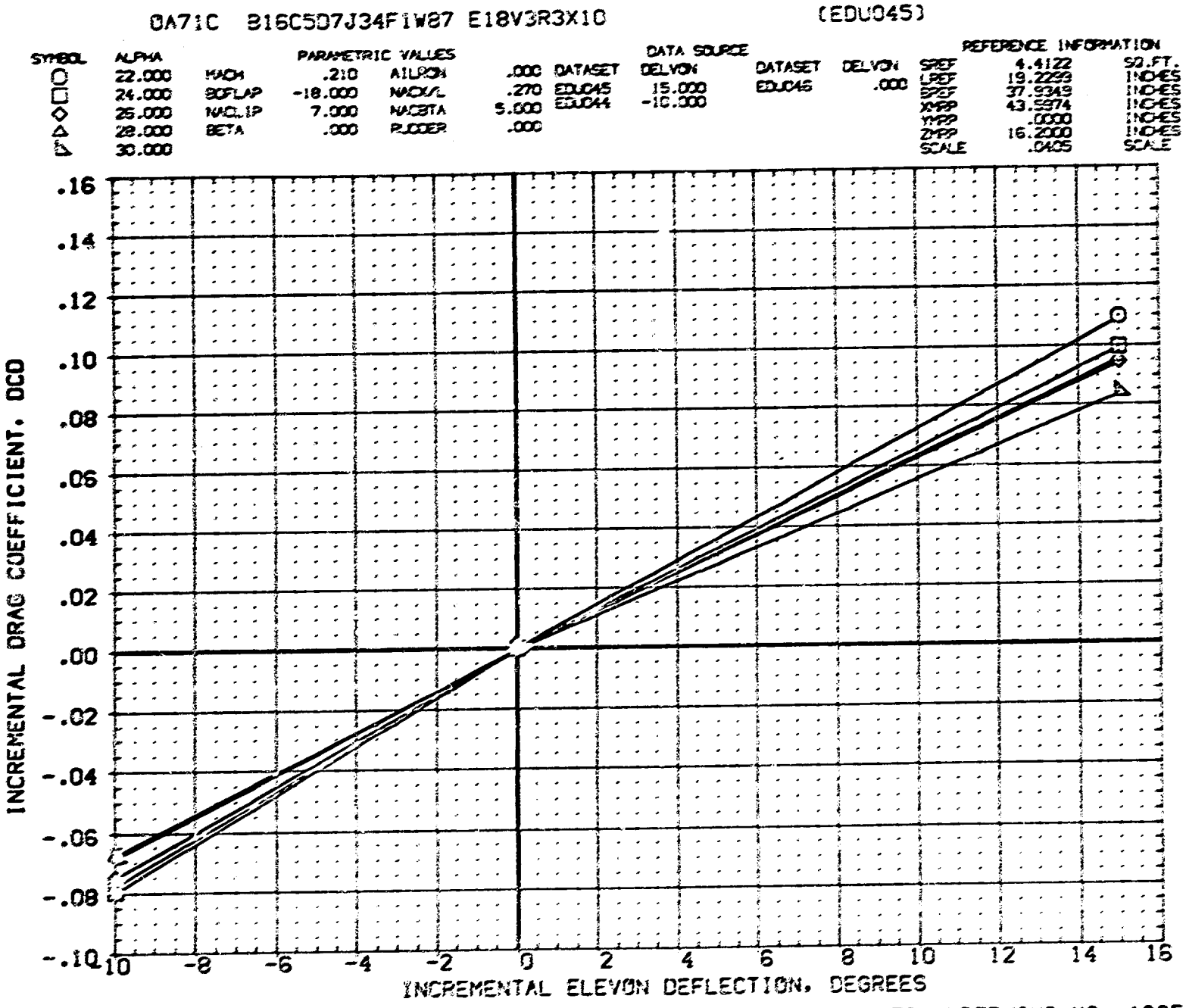


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

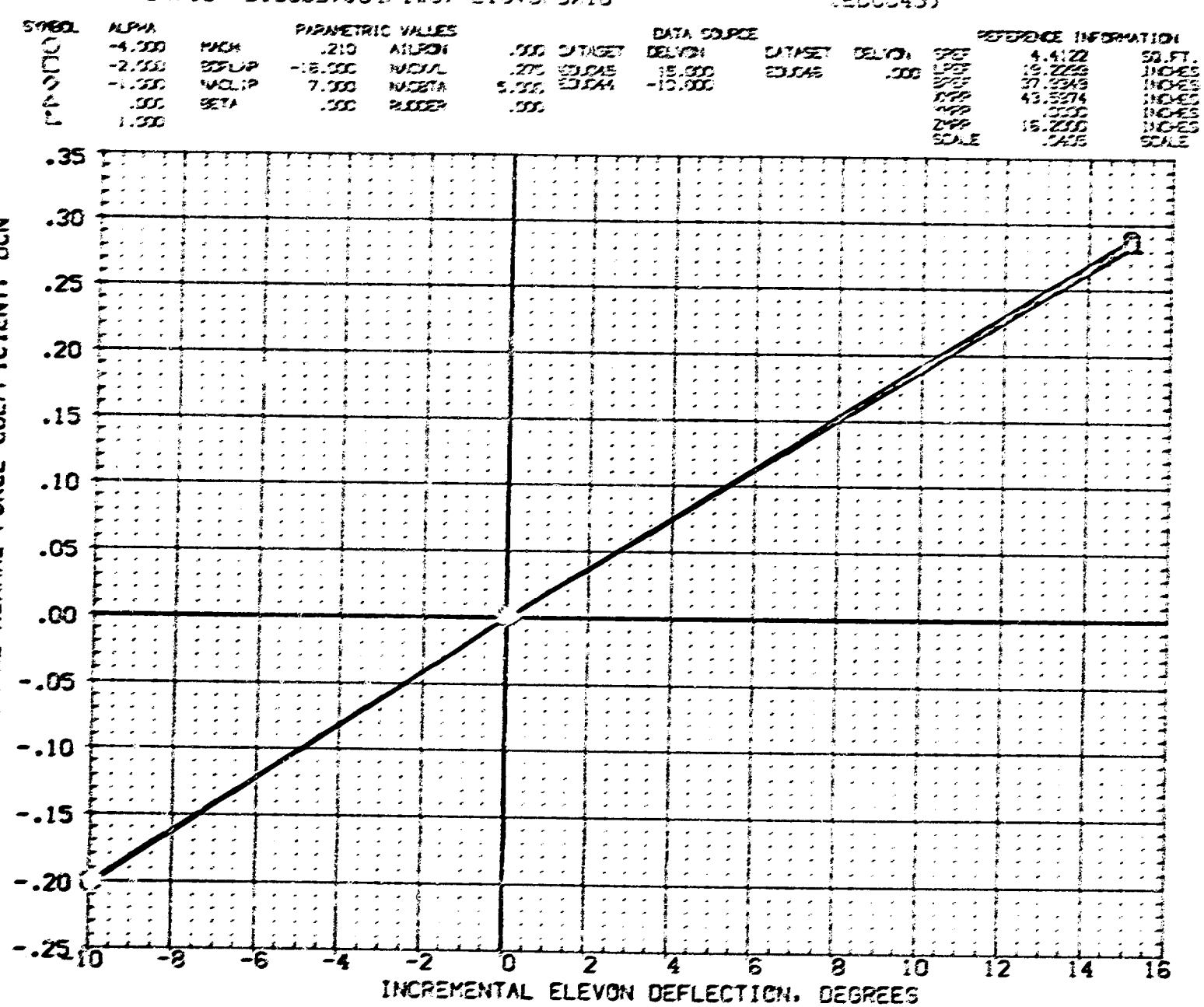


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

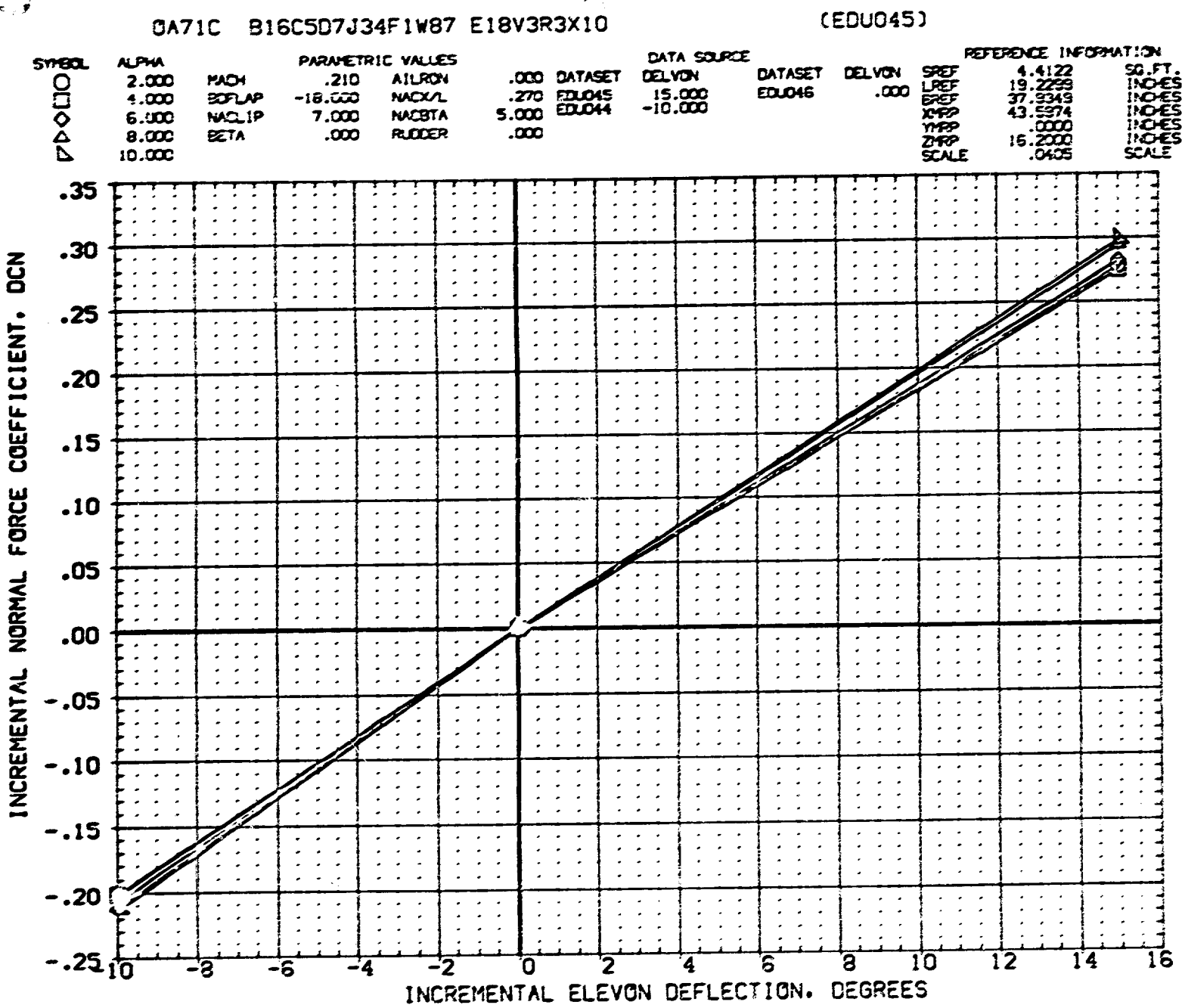


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

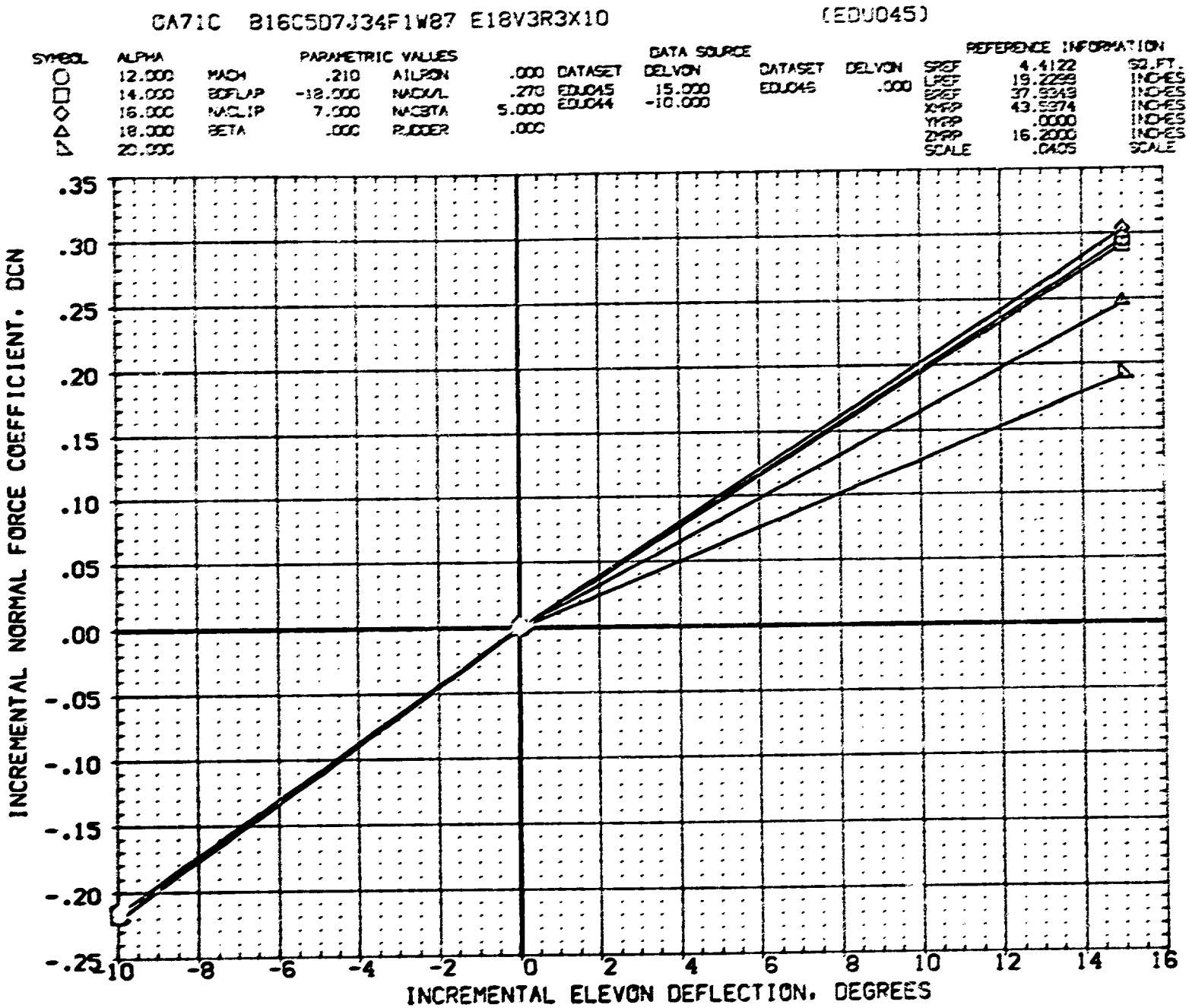


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

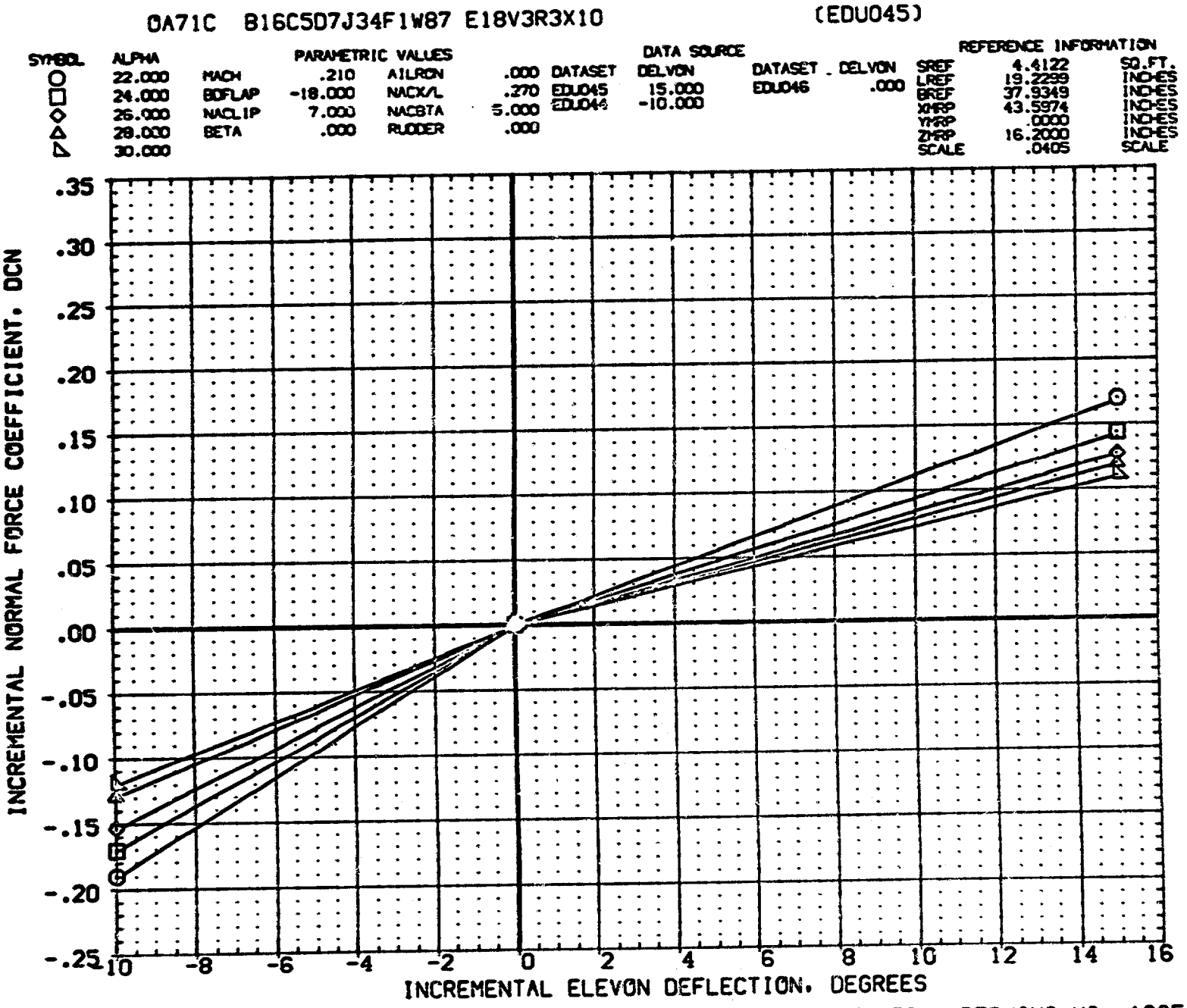


FIG 3 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BOFLAP	-18.000	NACWL	.270	EDU045	15.000	EDU046	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU044	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.040S	SCALE

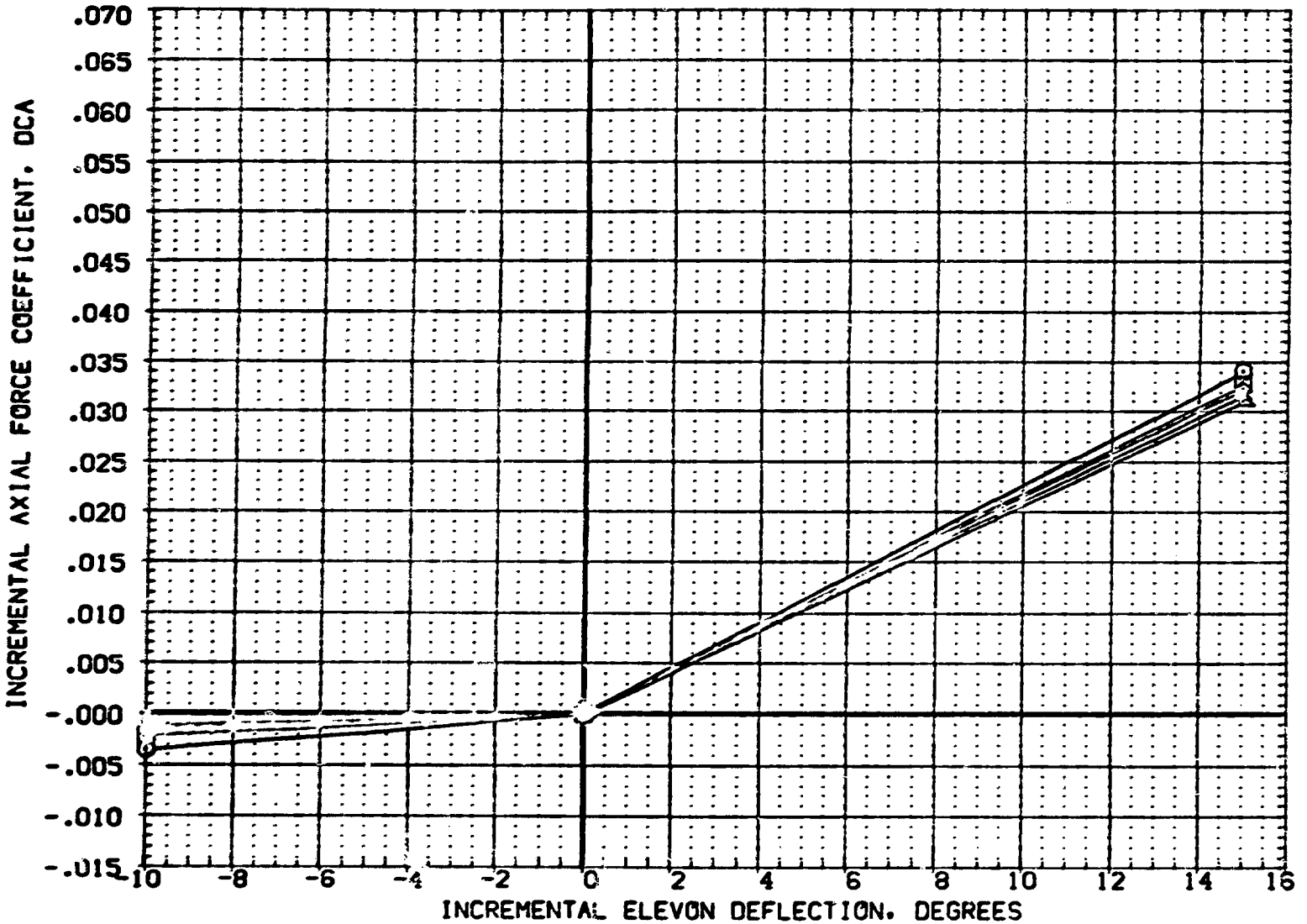


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XC= 1005

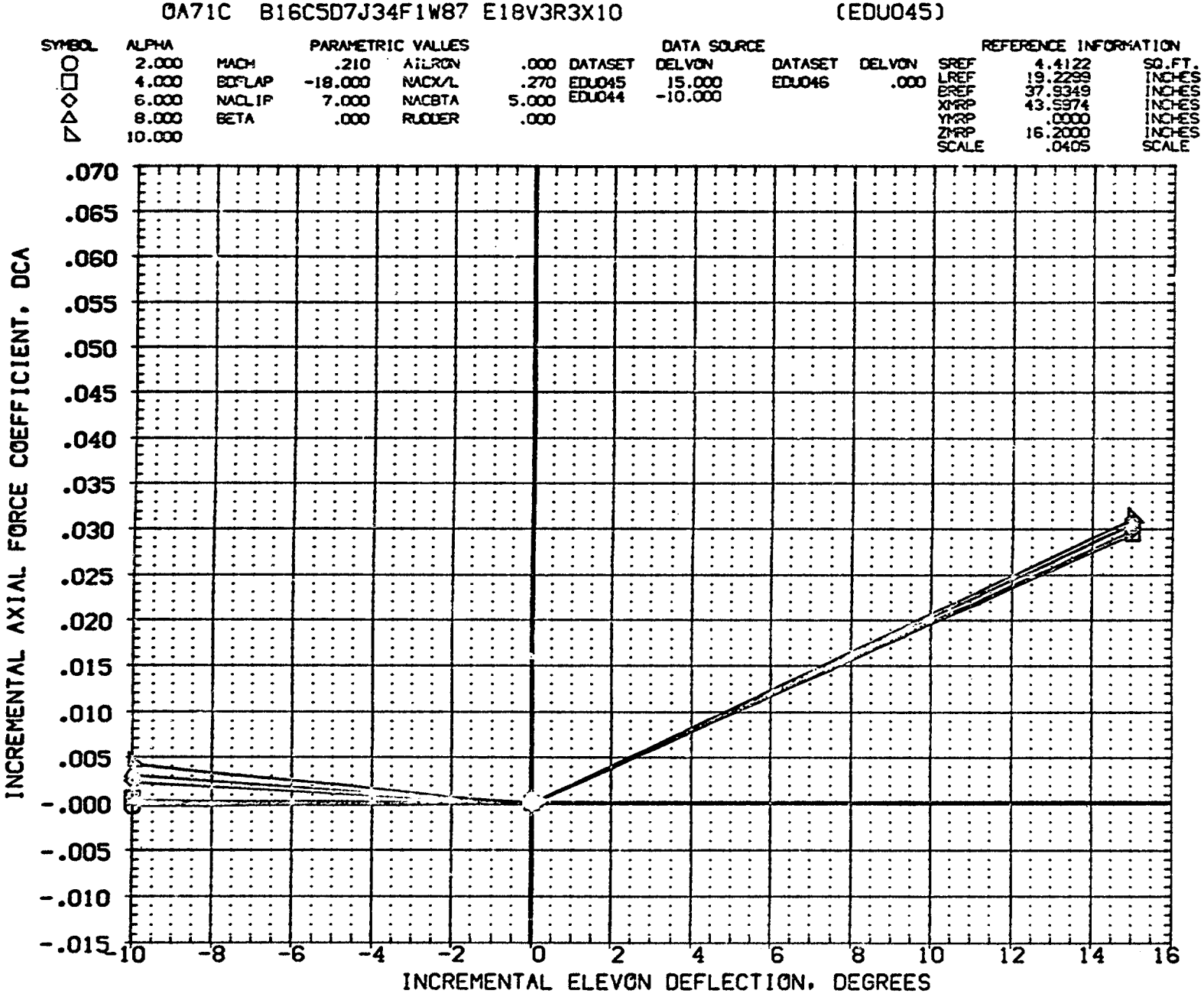


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU045)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	BOFLAP	-18.000	NACX/L	.270	EDU045	5.000	EDU046	.000	LREF	19.2299	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU044	-10.000			BREF	37.9349	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
◺	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

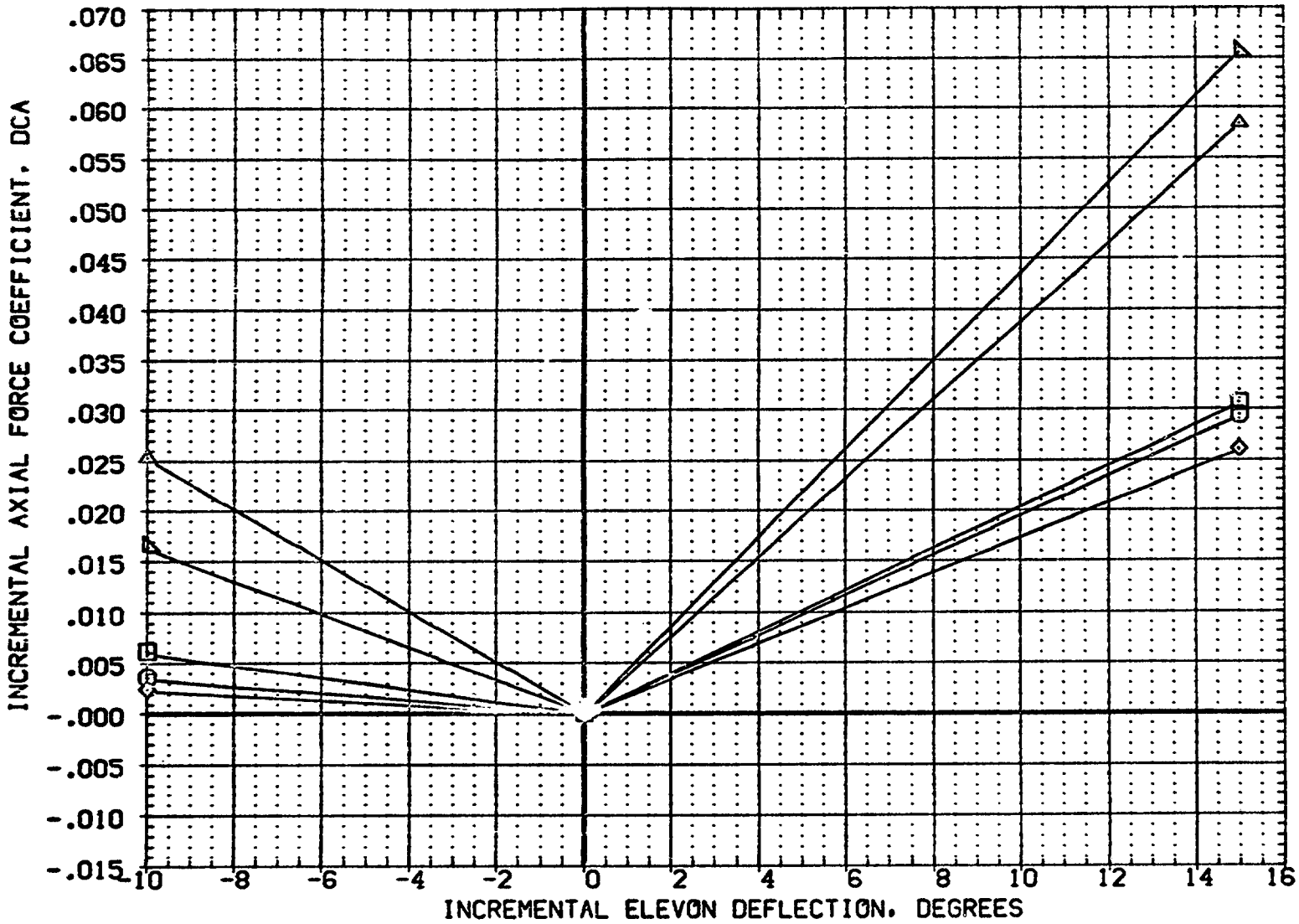


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

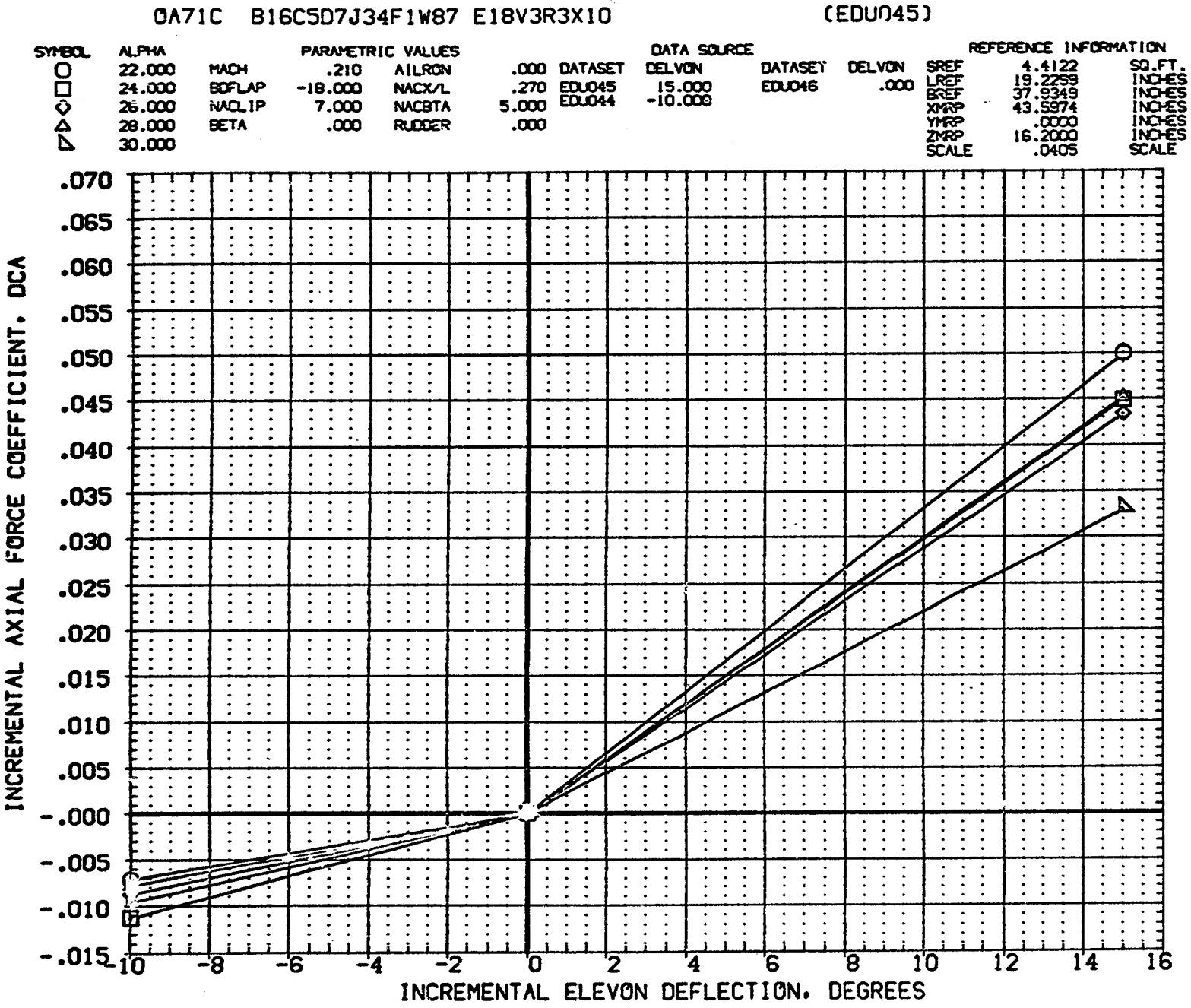


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

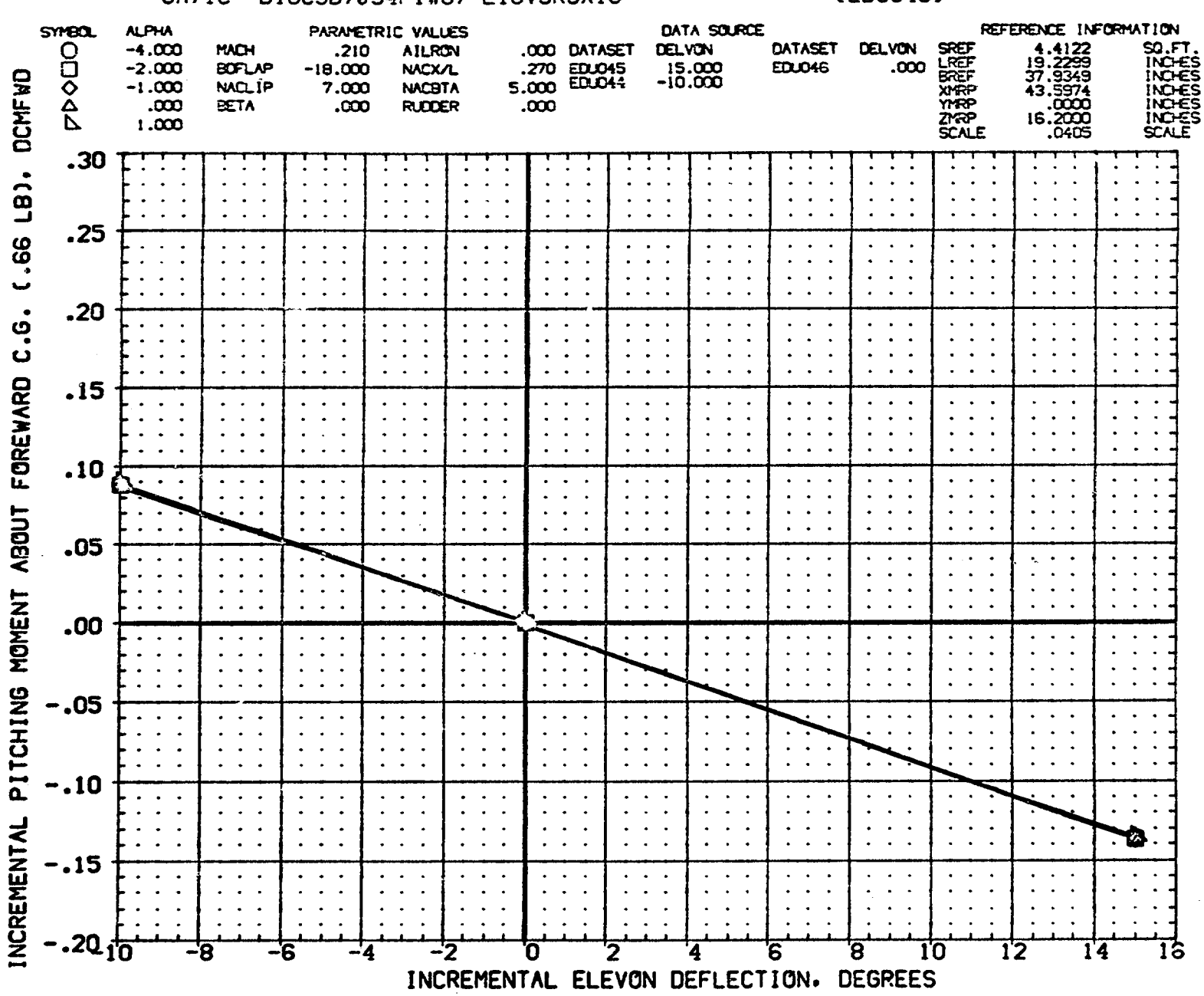


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

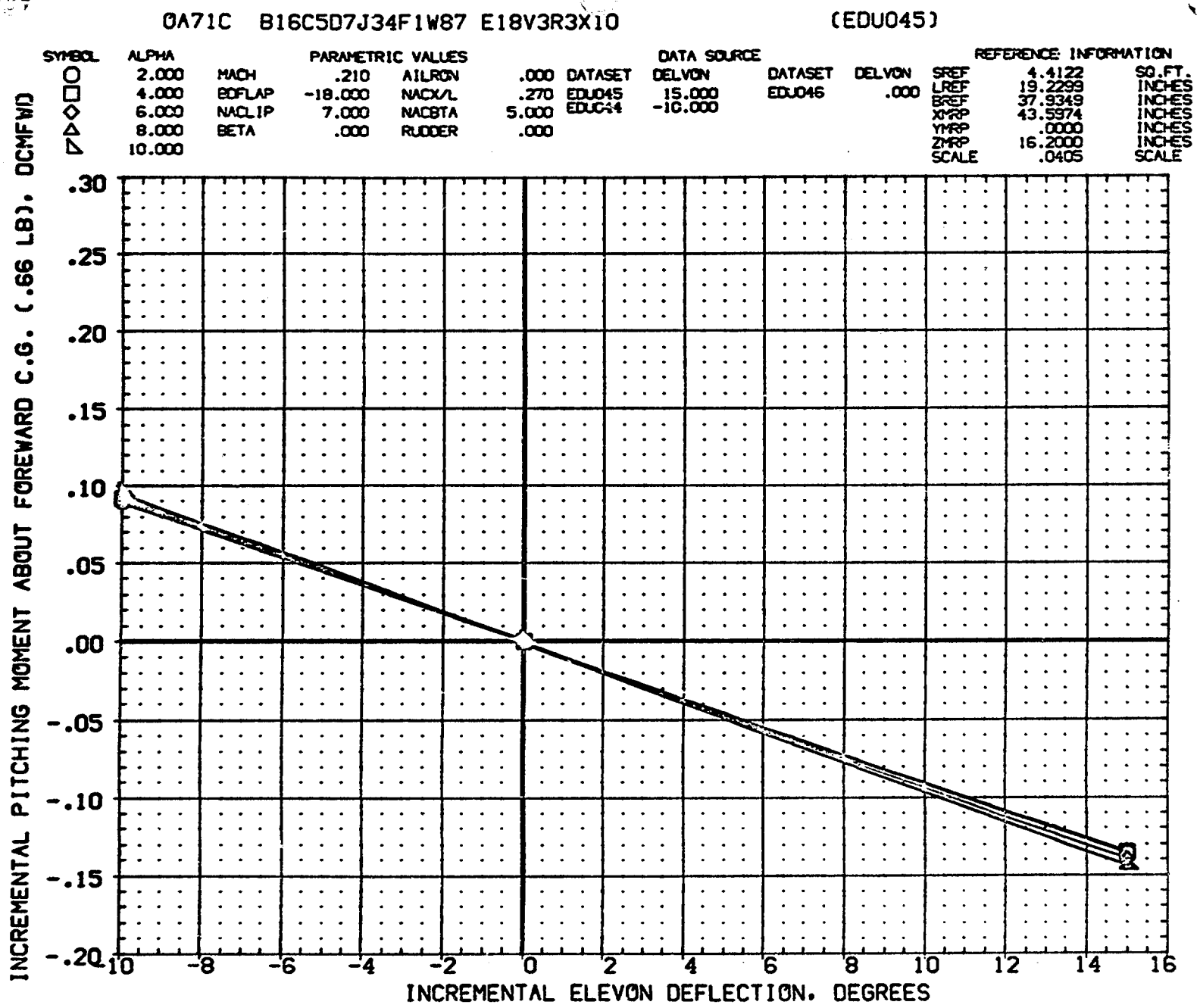


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

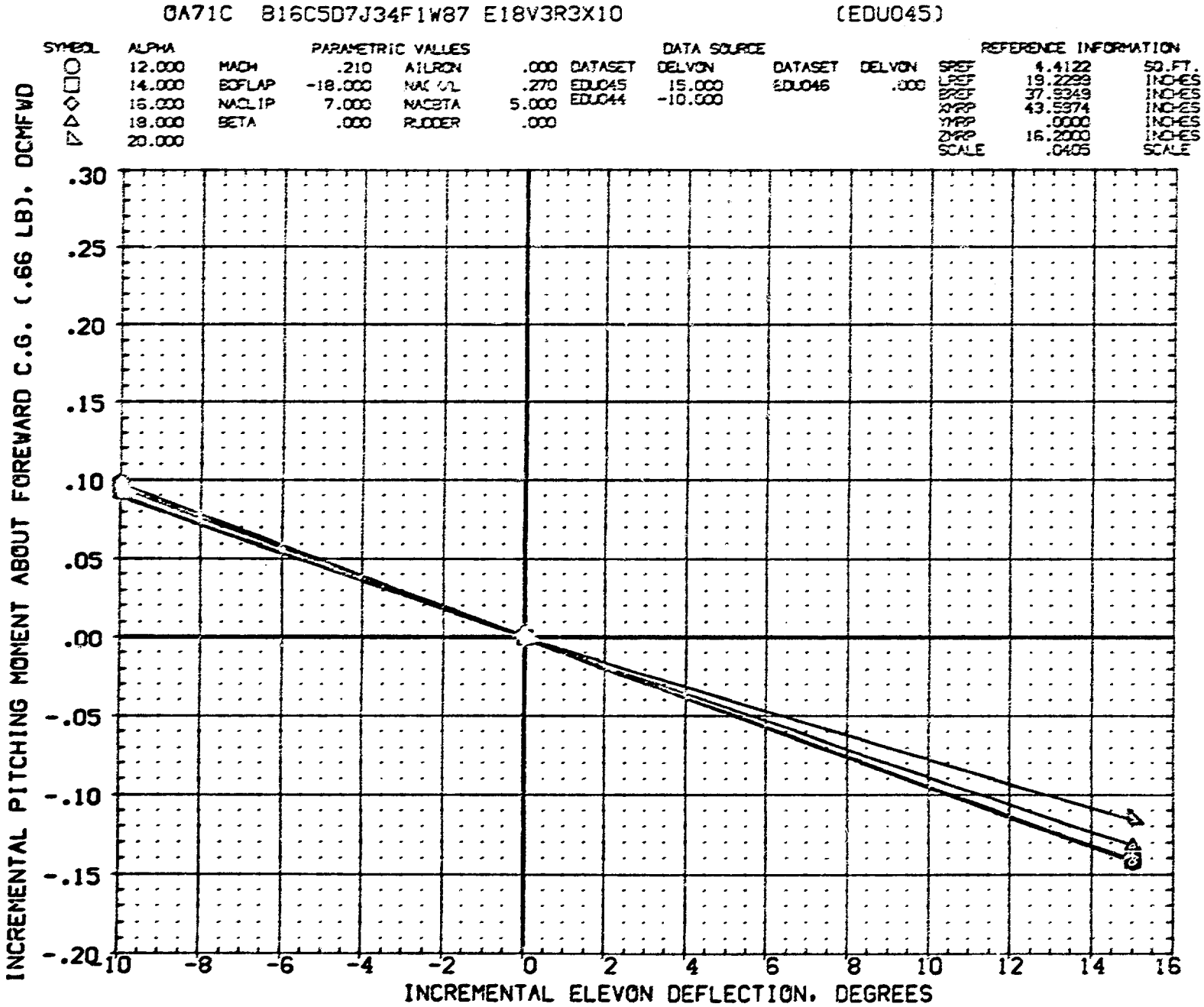


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

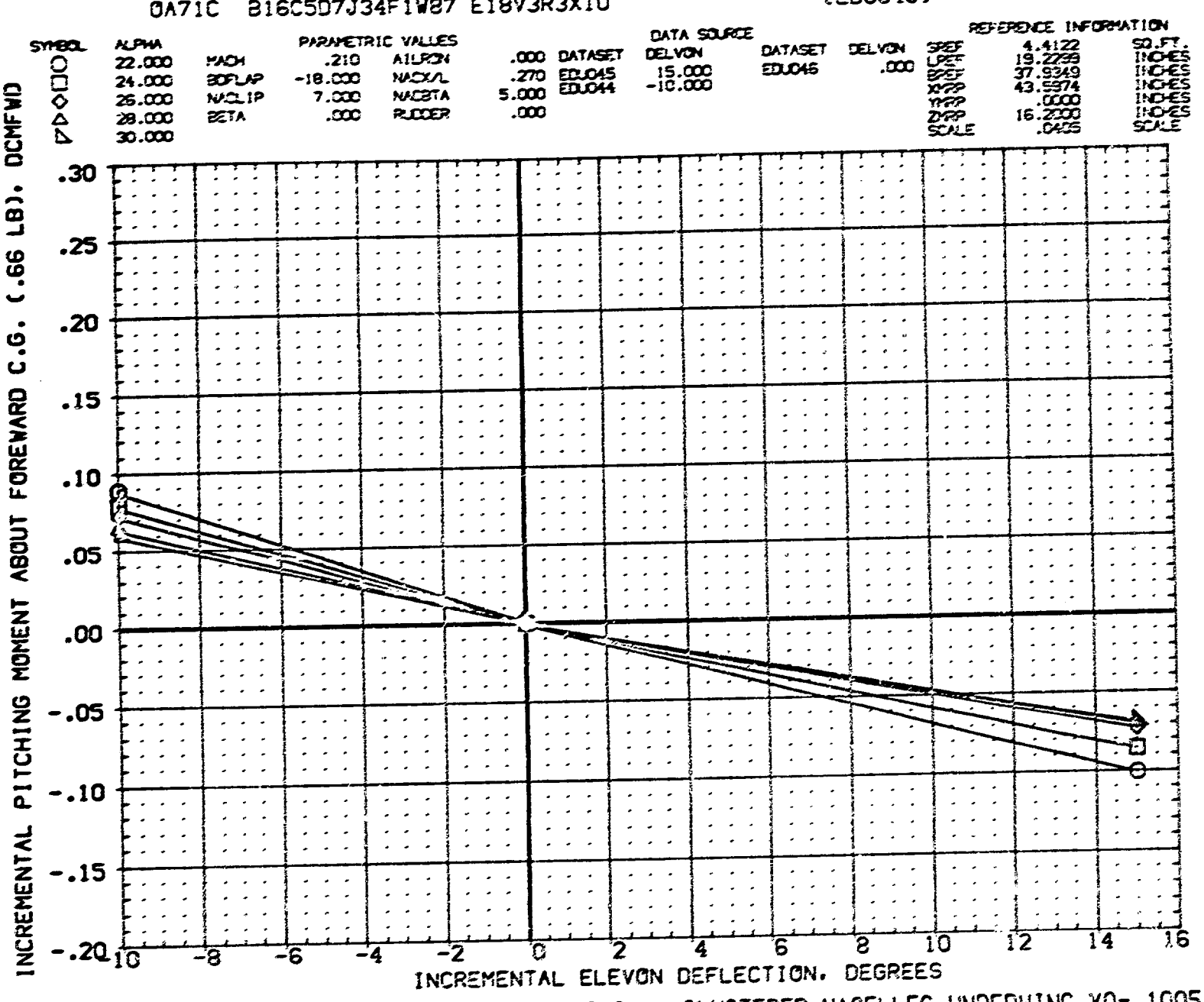


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU045)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BOFLAP	-18.000	NACX/L	.270	EDU045	15.000	EDU046	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU044	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE



FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

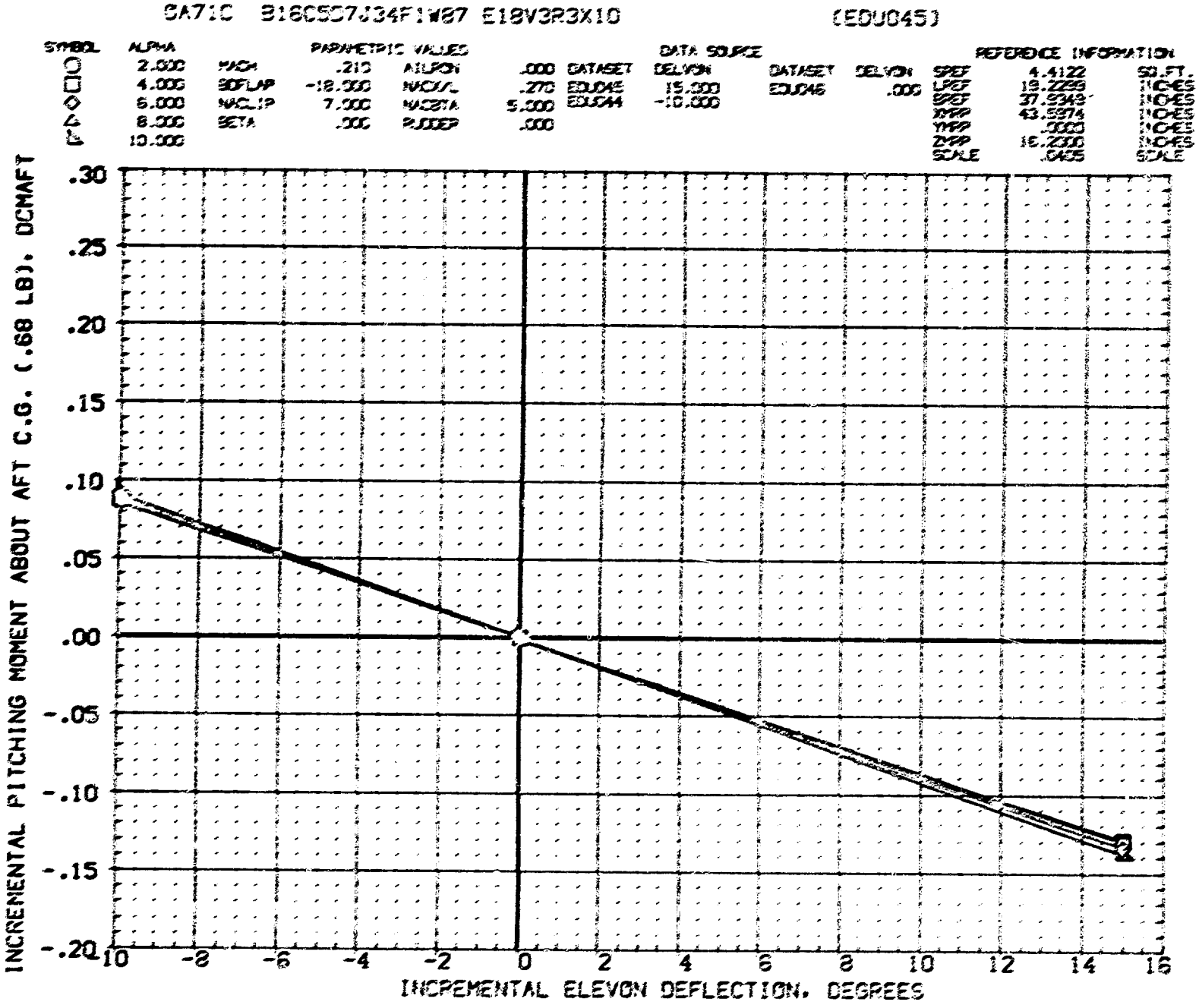


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

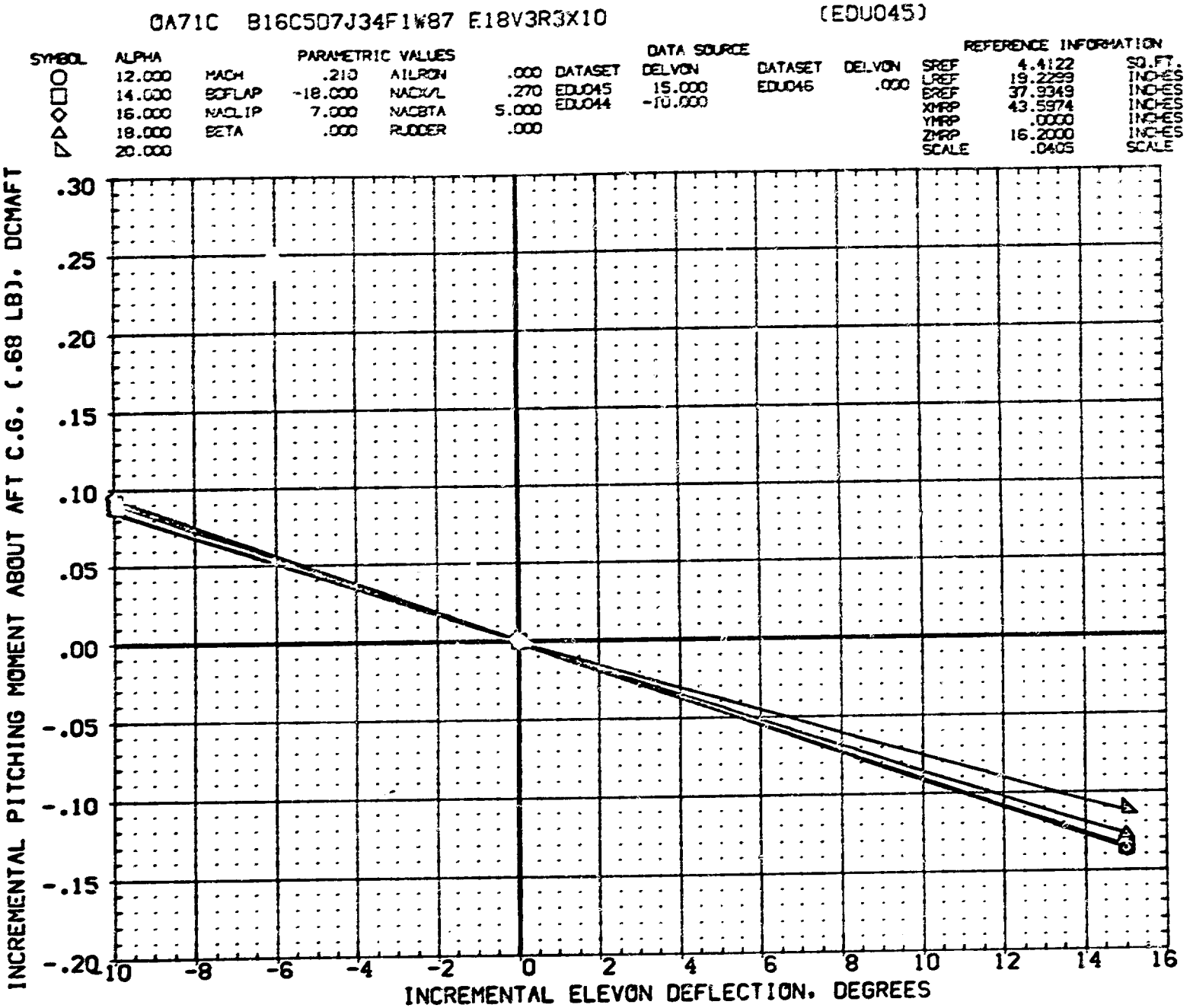


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1005

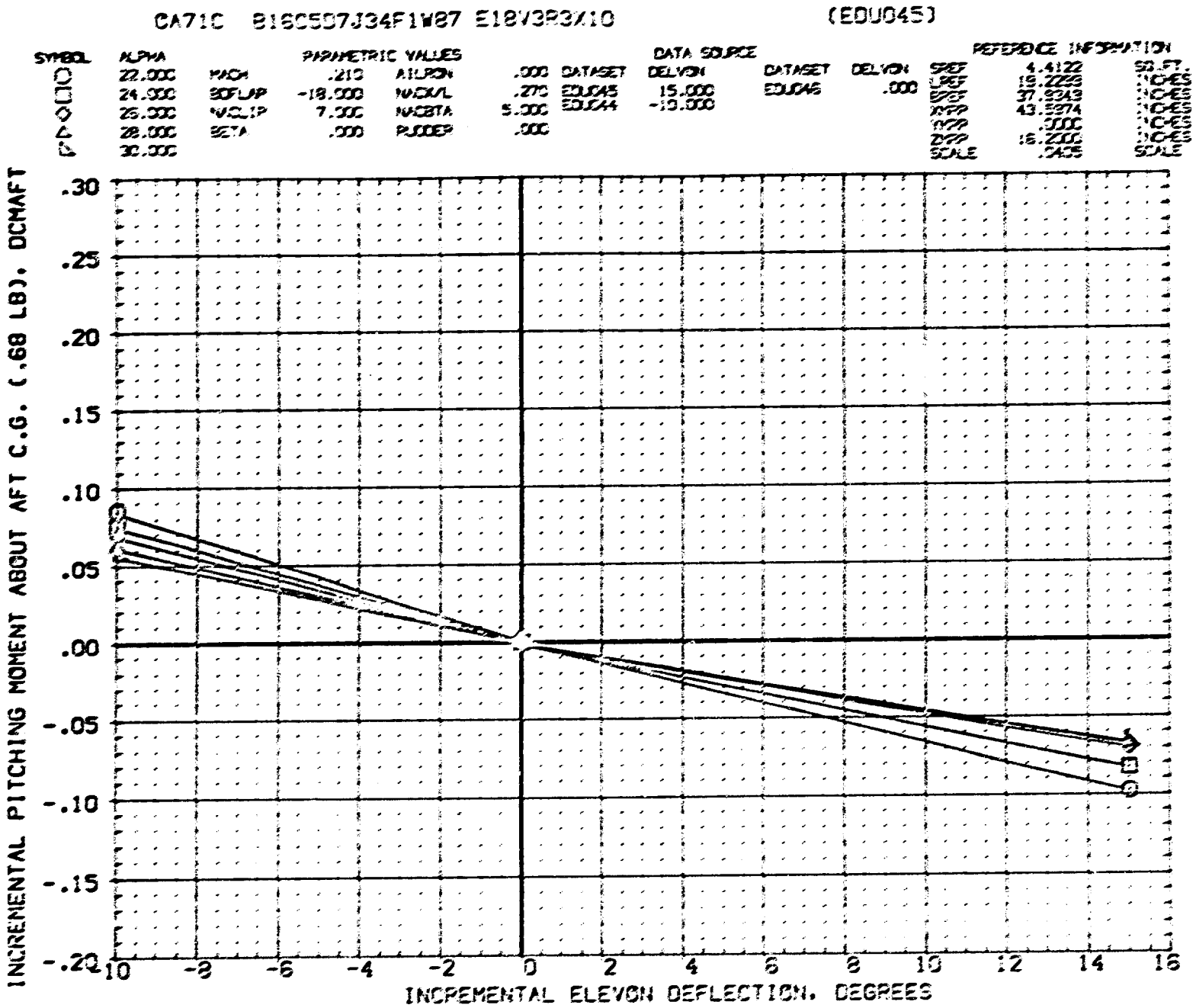


FIG 9 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XG= 1035

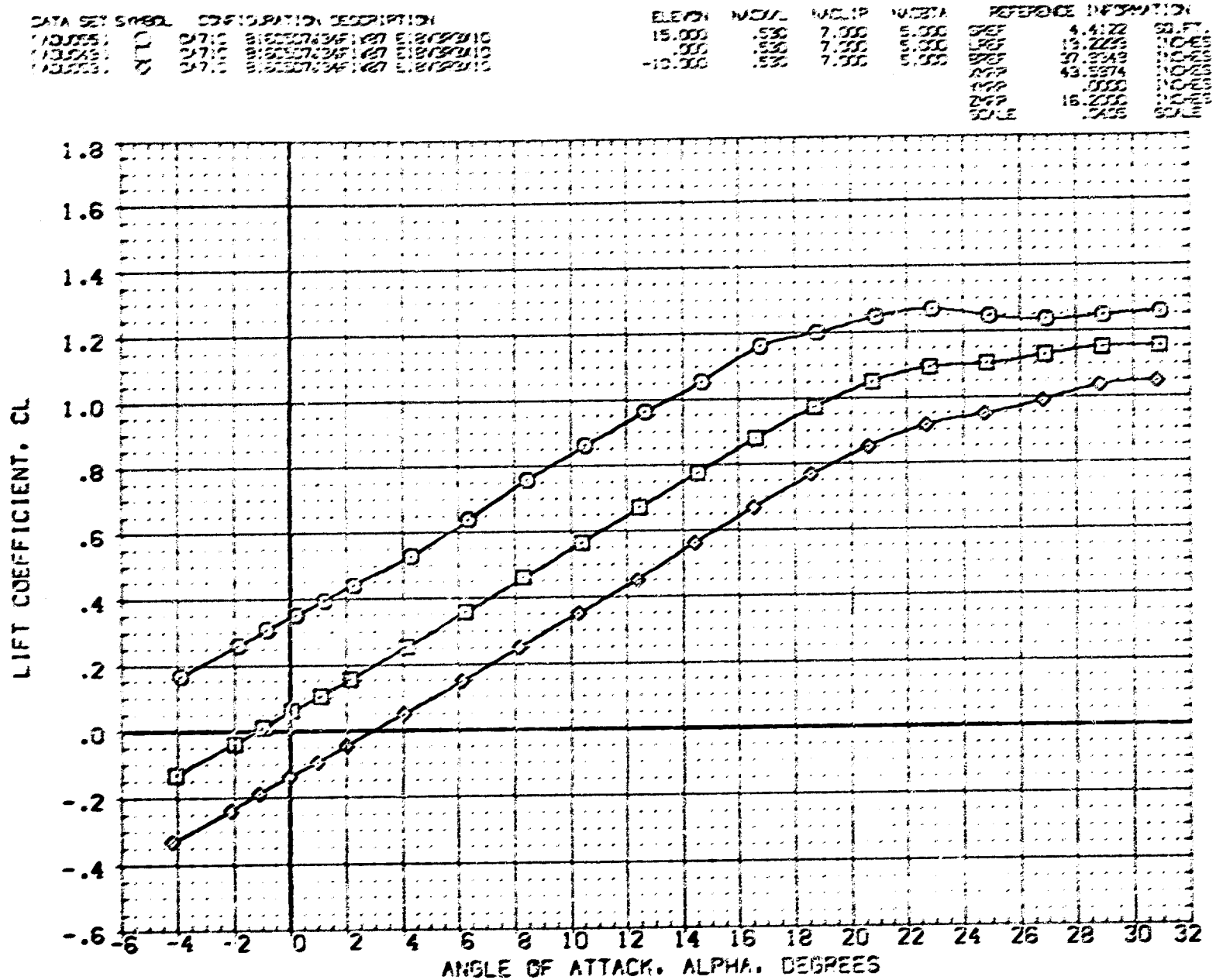


FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1080

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ADJ055)	CA71C B16C507J34F1V87 E18V3R3X10
(ADJ049)	CA71C B16C507J34F1V87 E18V3R3X10
(ADJ053)	CA71C B16C507J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0435	SCALE

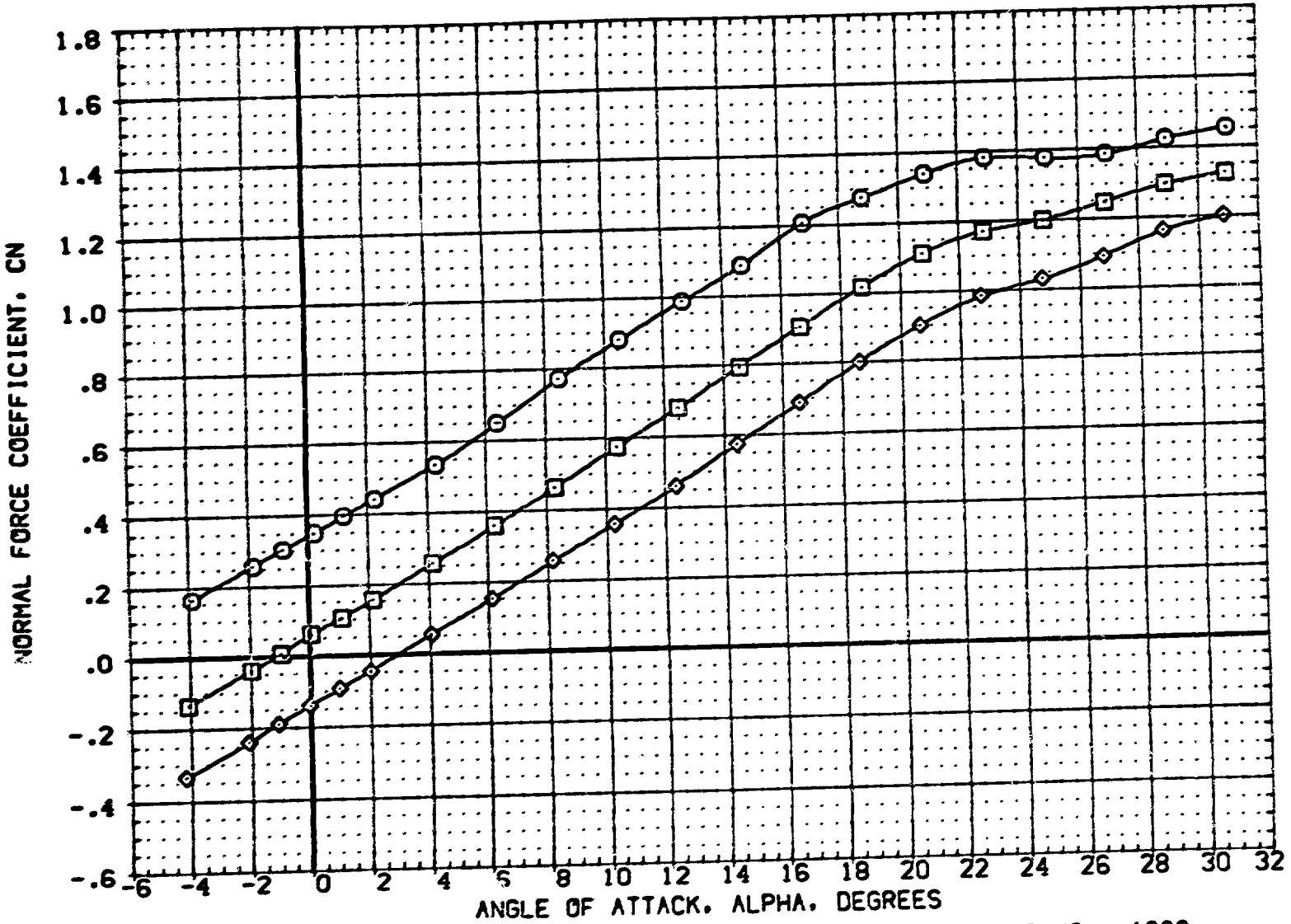


FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ADU055)		DA71C B16C507J34F1V87 E18V3R3X10
(ADU049)		DA71C B16C507J34F1V87 E18V3R3X10
(ADU053)		DA71C B16C507J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2298	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

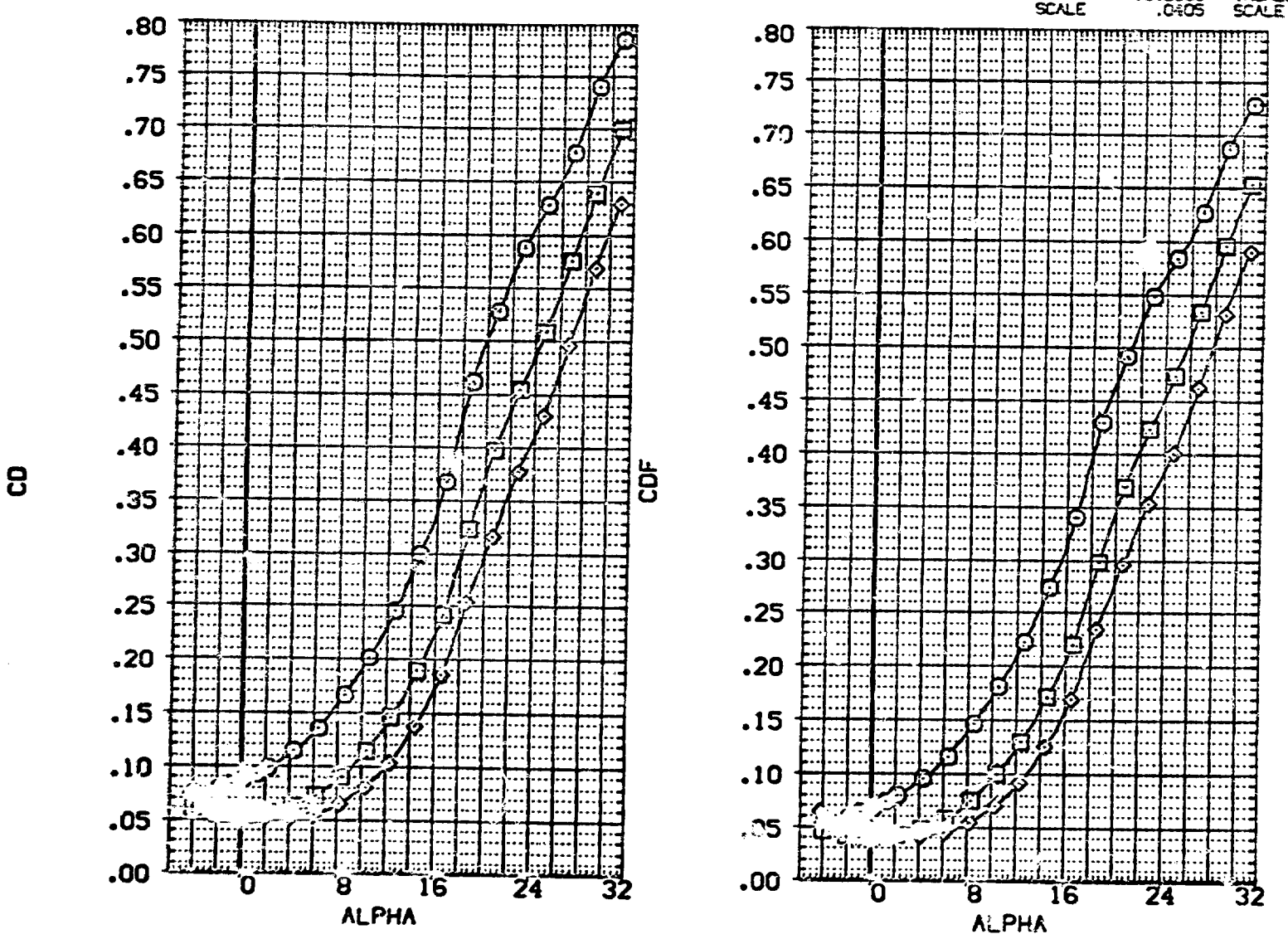


FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION			
(ADU055)	OA7IC	B16CSD7J34F1W87	E18V3R3X10	
(ADU049)	OA7IC	B16CSD7J34F1W87	E18V3R3X10	
(ADU053)	OA7IC	B16CSD7J34F1W87	E18V3R3X10	

ELEVON	NACX/L	NACLIP	NALBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2239	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

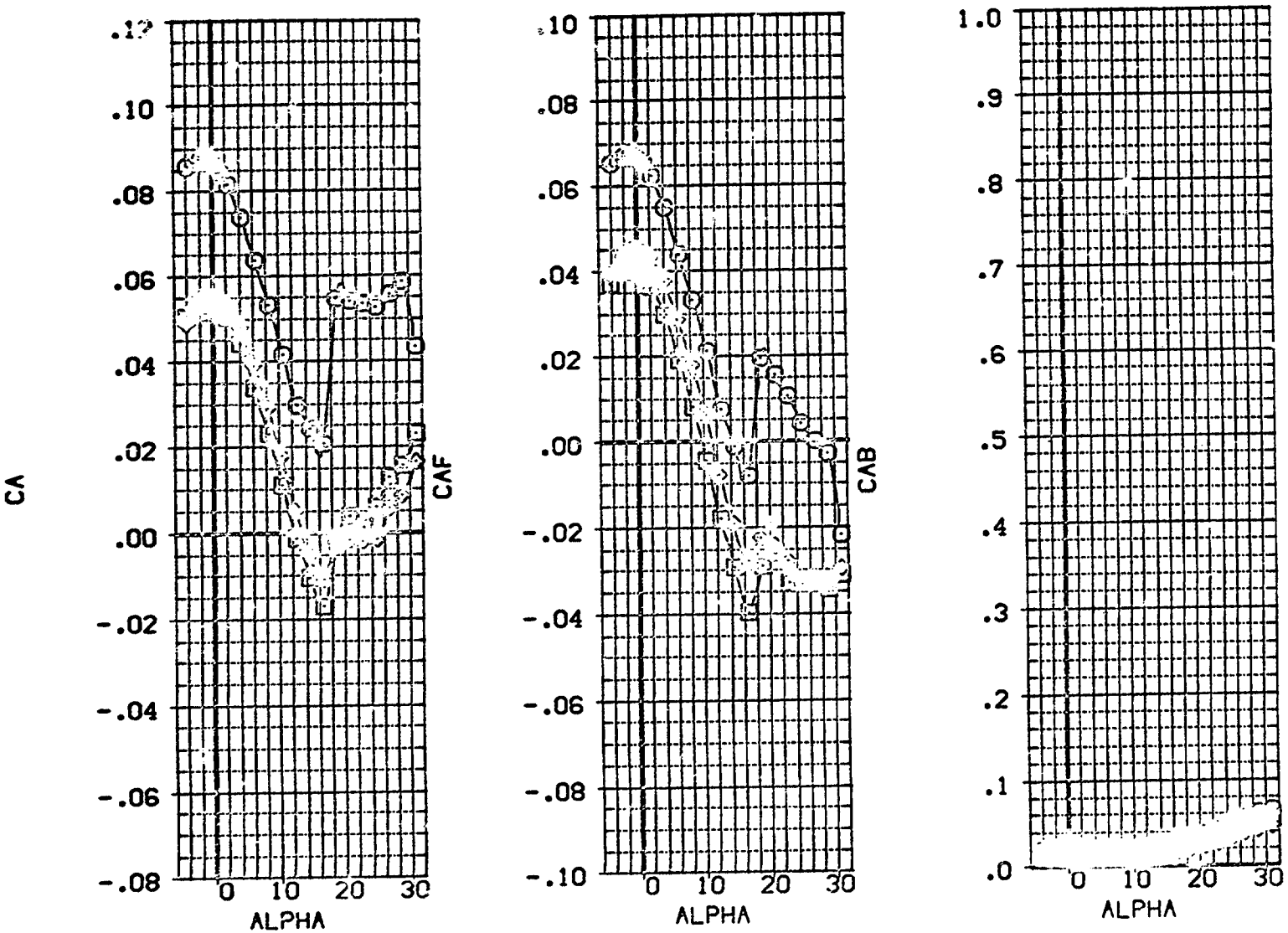


FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ADU055)	○	0A71C B16C507J34F1V87 E18V3R3X10
(ADU049)	□	0A71C B16C507J34F1V87 E18V3R3X10
(ADU053)	◇	0A71C B16C507J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2259	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

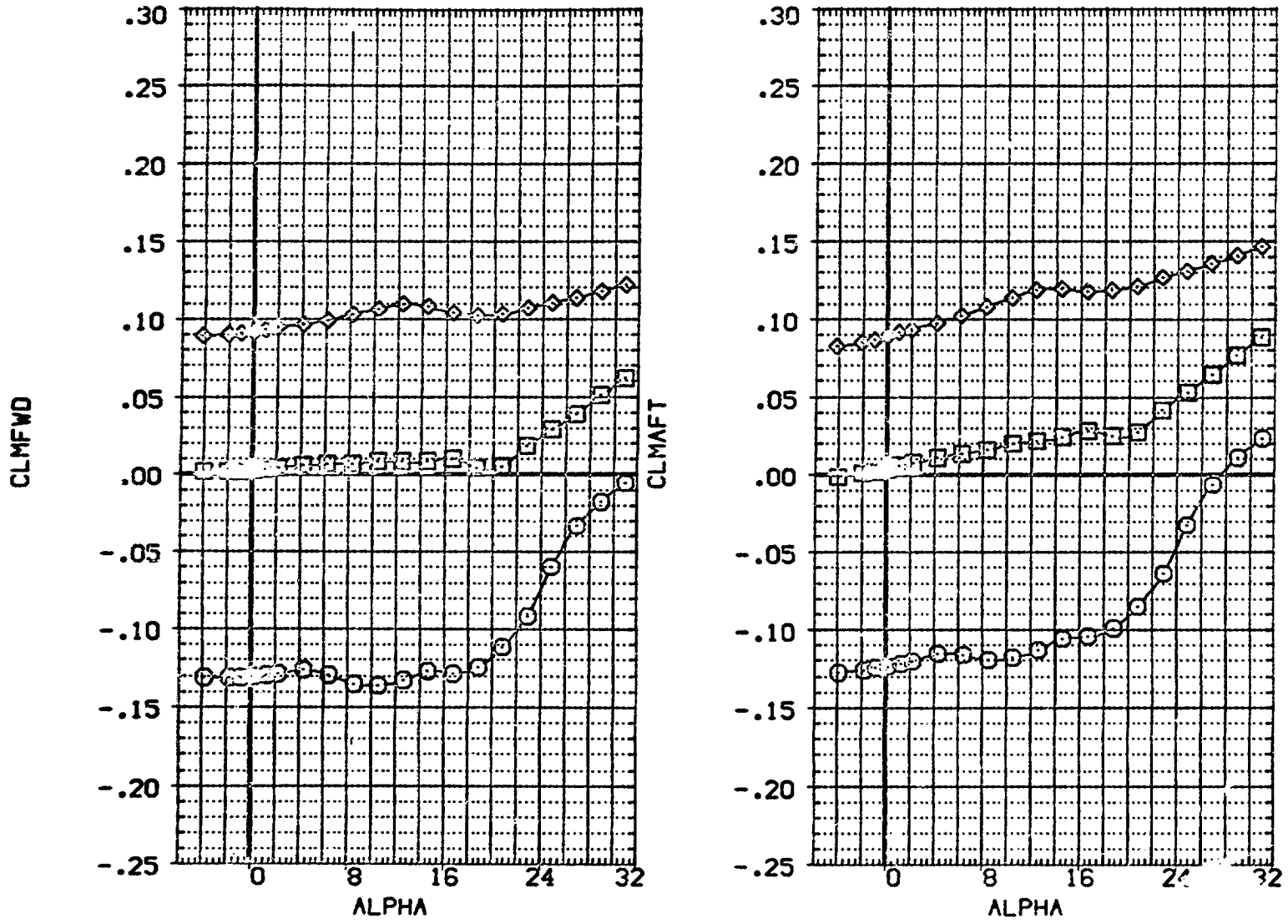


FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU055)	○	CA71C B16CSD7J34F1V87 E18V3R3X10	15.000	.530	7.000	5.000
(ADU049)	□	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000
(ADU053)	◇	CA71C B16CSD7J34F1V87 E18V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE



FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(ADU055)	▭	0A71C B16C507J34F1V87 E18V3R3X10
(ADU049)	□	0A71C B16C507J34F1V87 E18V3R3X10
(ADU053)	◇	0A71C B16C507J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

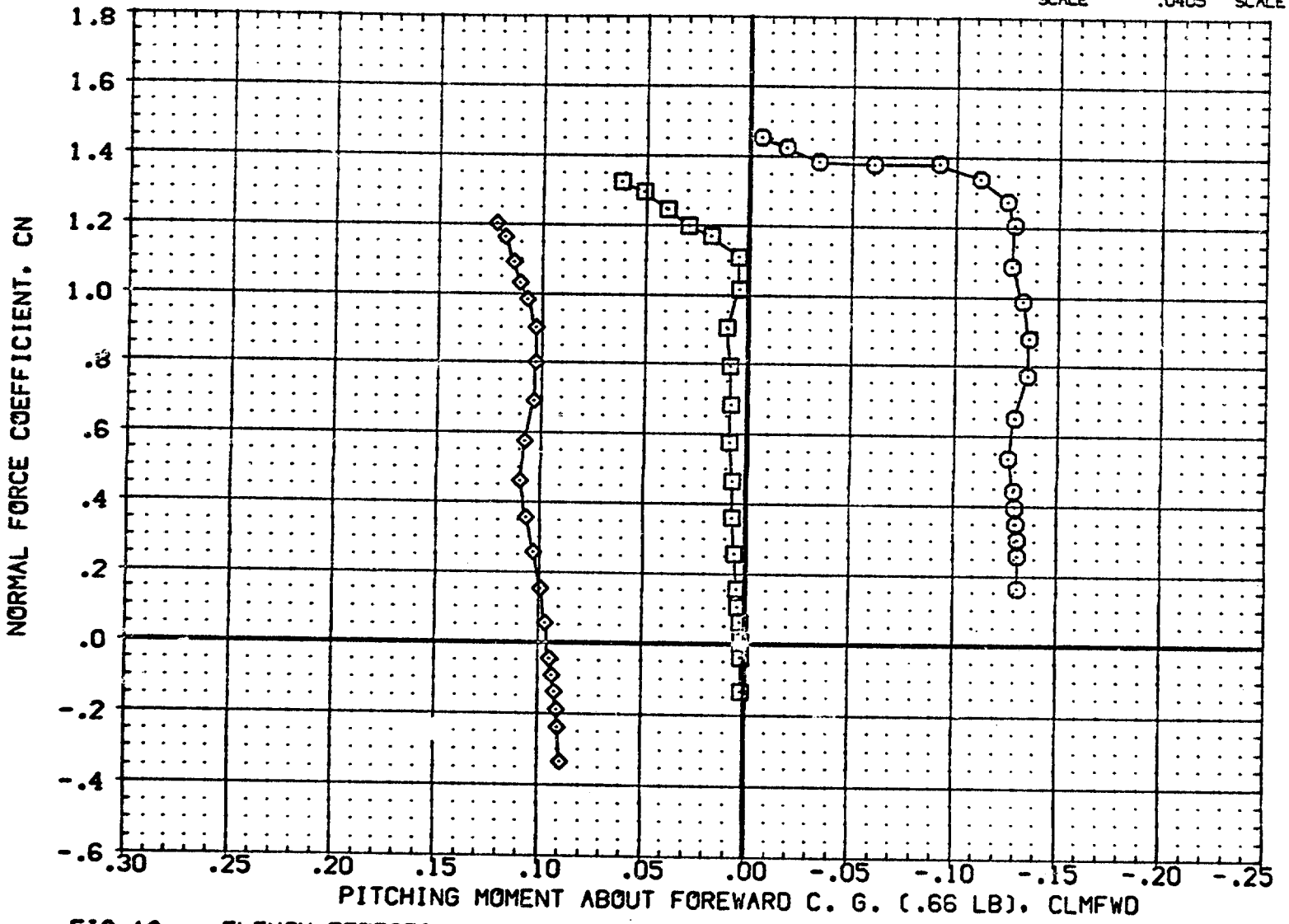


FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ADU055) ○	OA71C B16C507J34F1V87 E18V3R3X10
(ADU049) □	OA71C B16C507J34F1V87 E18V3R3X10
(ADU053) ◇	OA71C B16C507J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

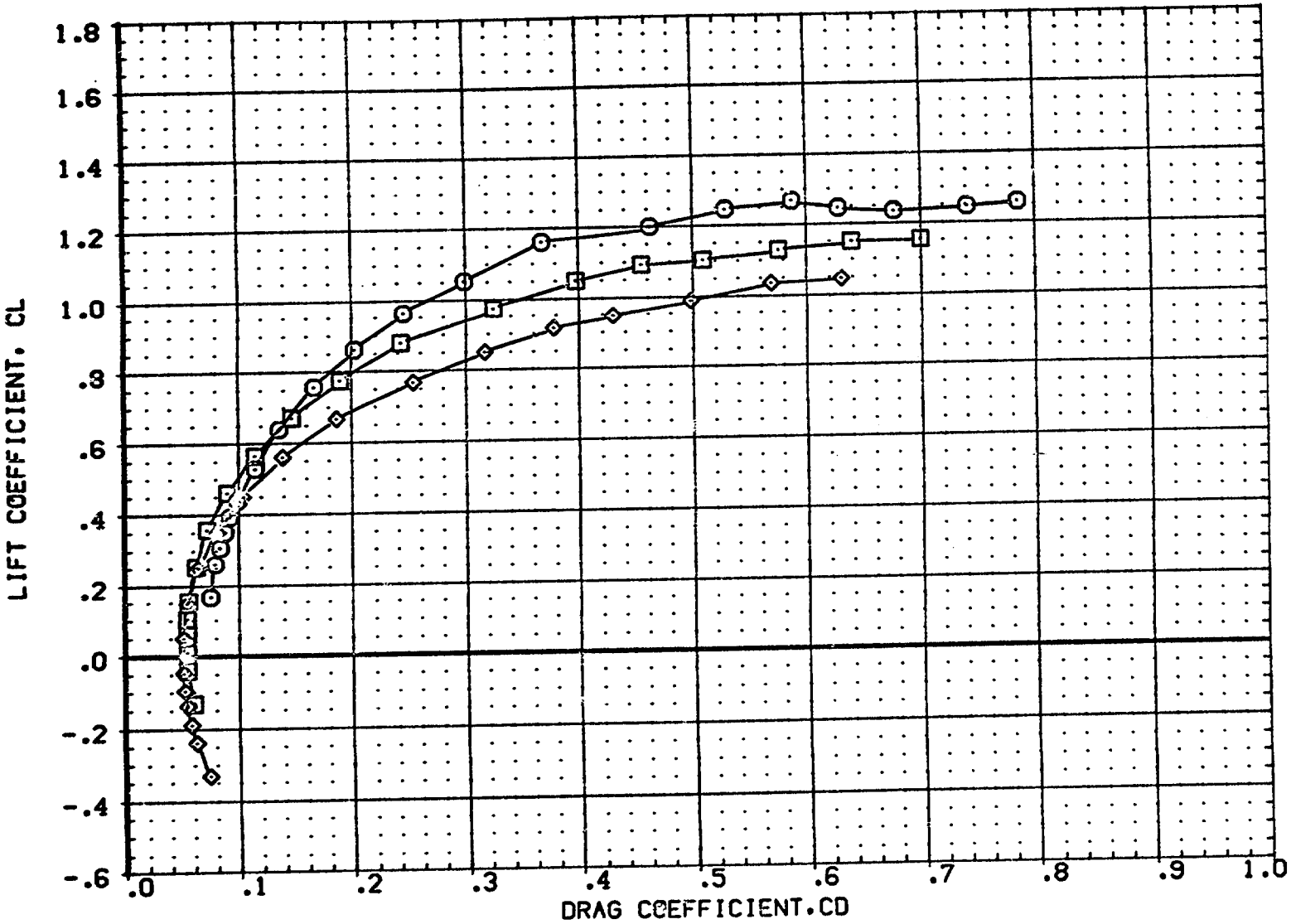


FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1060

(A)MACH = .20

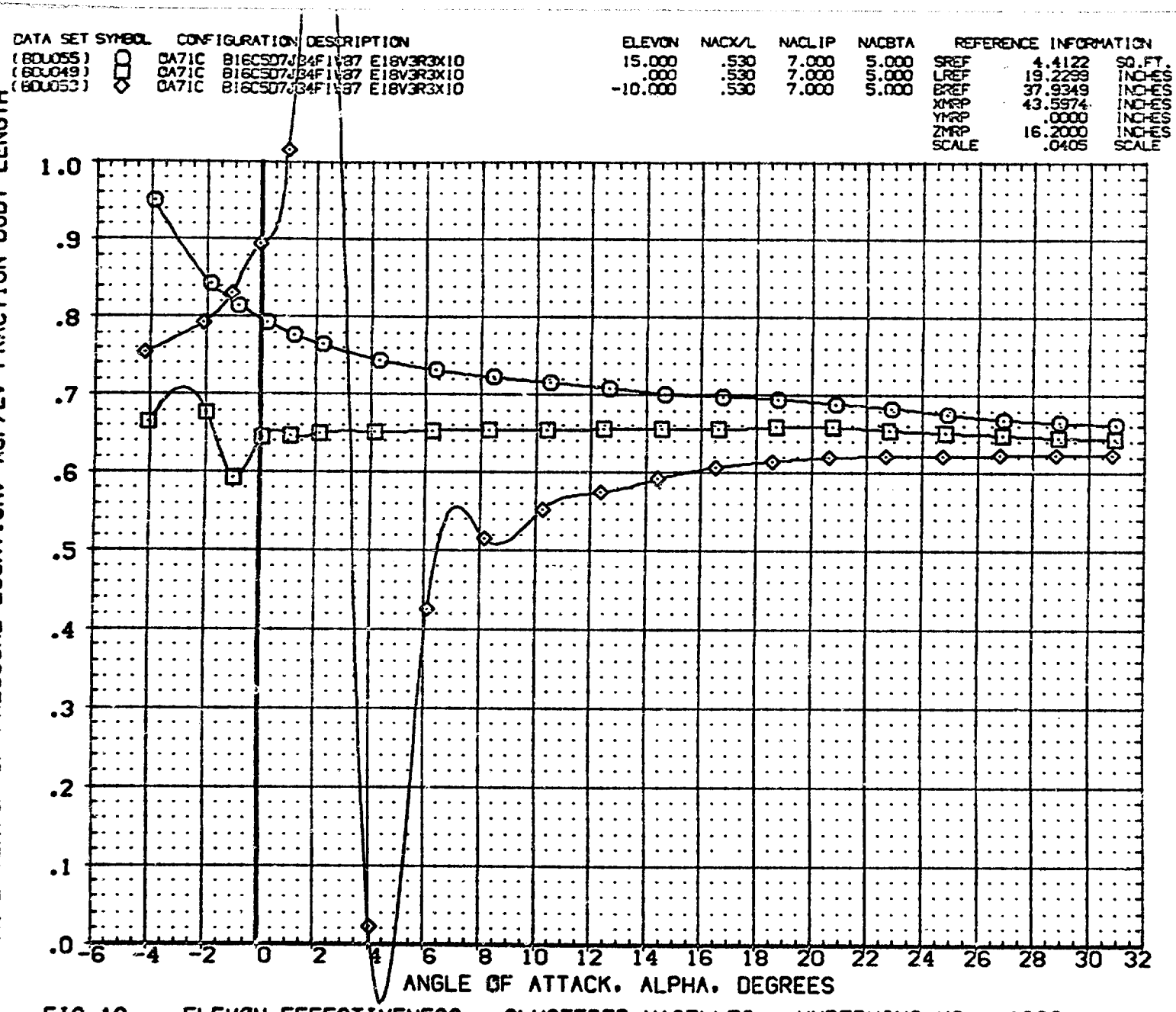


FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(BDU055) ○	0A71C B16C5D7J34F1V87 E18V3R3X10	15.000	.530	7.000	5.000
(BDU049) □	0A71C B16C5D7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000
(BDU053) ◇	0A71C B16C5D7J34F1V87 E18V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

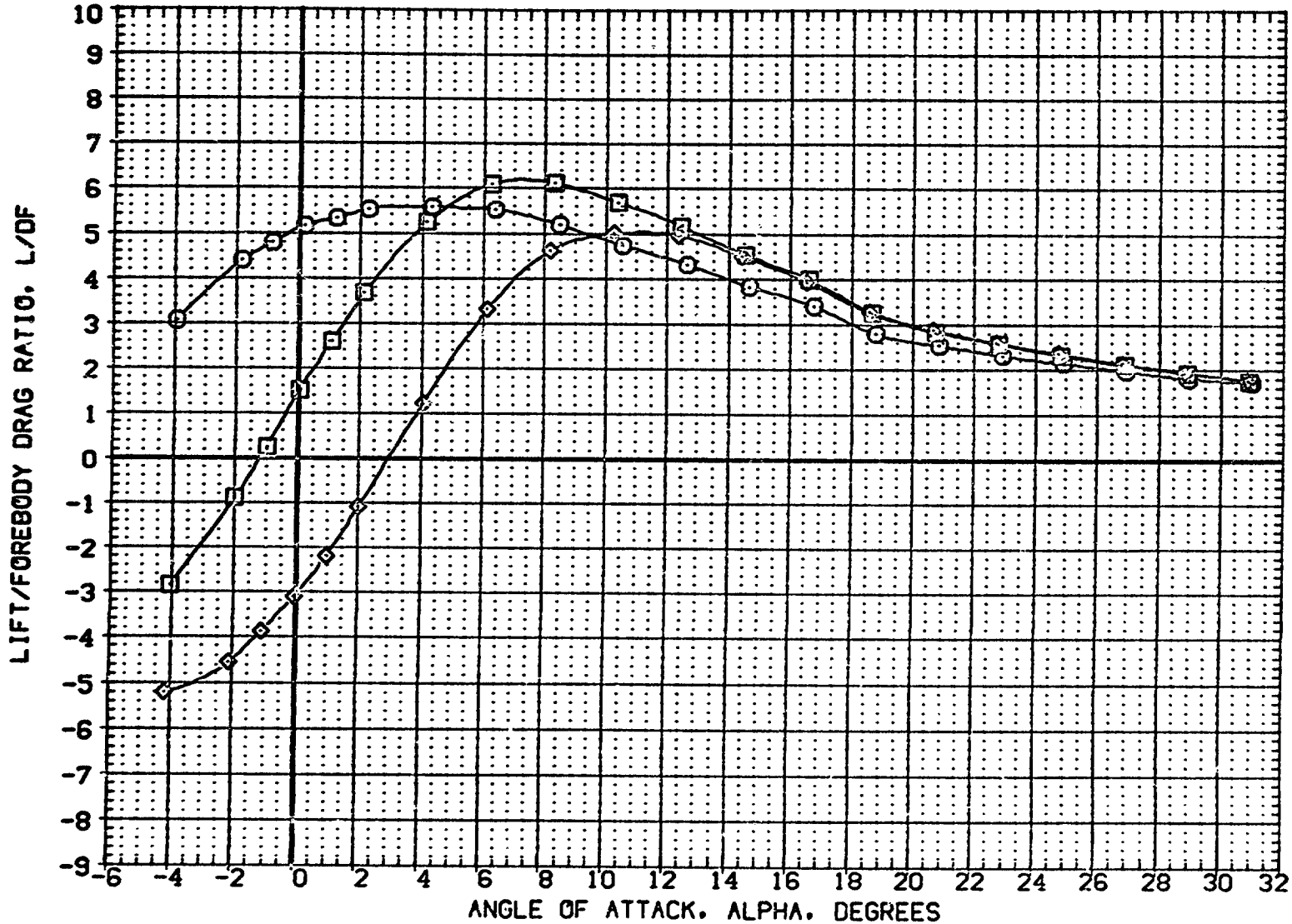


FIG 10 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - UNDERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	DELVON	NACX/L	NACLIP	NACBTA
(EDU055)	○	OA71C B16C507J34F1V87 E18V3R3X10	15.000	.530	7.000	5.000
(EDU049)	□	OA71C B16C507J34F1V87 E18V3R3X10	.000	.530	7.000	5.000
(EDU053)	◇	OA71C B16C507J34F1V87 E18V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.040S	SCALE



FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DELVON	NACX/L	NACLIP	NACBTA
(EDU055) □	0A71C B16CS07J34F1W87 E18V3R3X10	15.000	.530	7.000	5.000
(EDU049) ◻	0A71C B16CS07J34F1W87 E18V3R3X10	.000	.530	7.000	5.000
(EDU053) ◇	0A71C B16CS07J34F1W87 E18V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2239	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

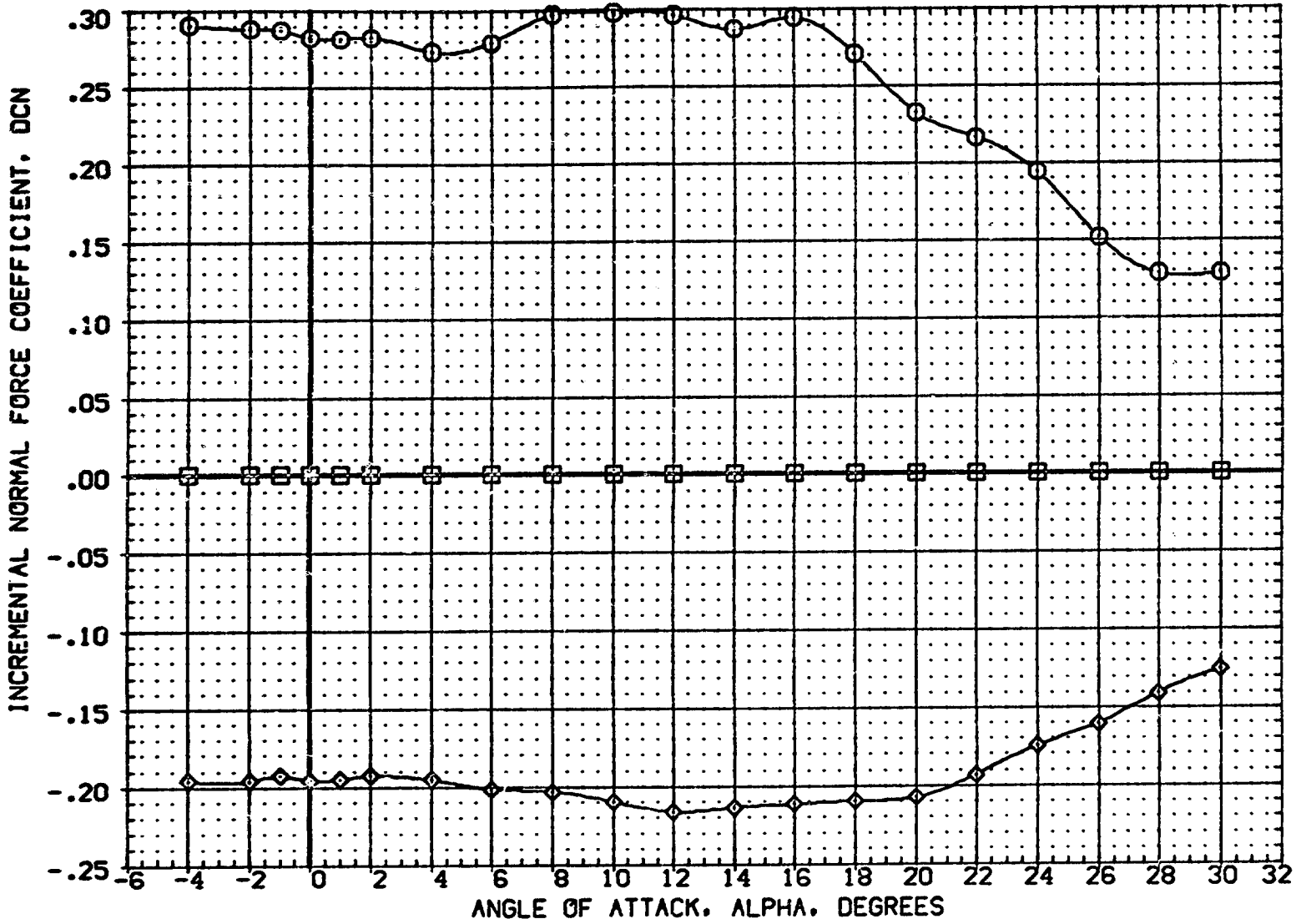


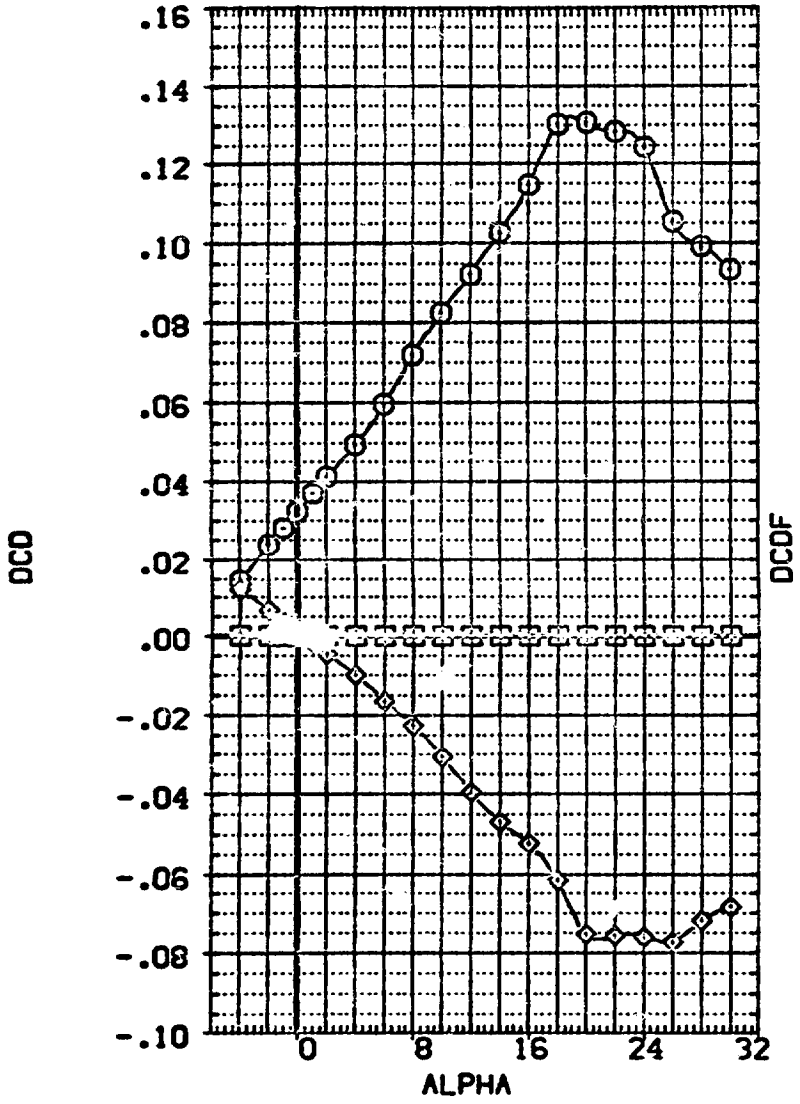
FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

(A)MACH = .21

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(EDU055)	○	OA71C B16CSD7J34F1V87 E18V3R3X10
(EDU049)	□	OA71C B16CSD7J34F1V87 E18V3R3X10
(EDU053)	◇	OA71C B16CSD7J34F1V87 E18V3R3X10

DELVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE



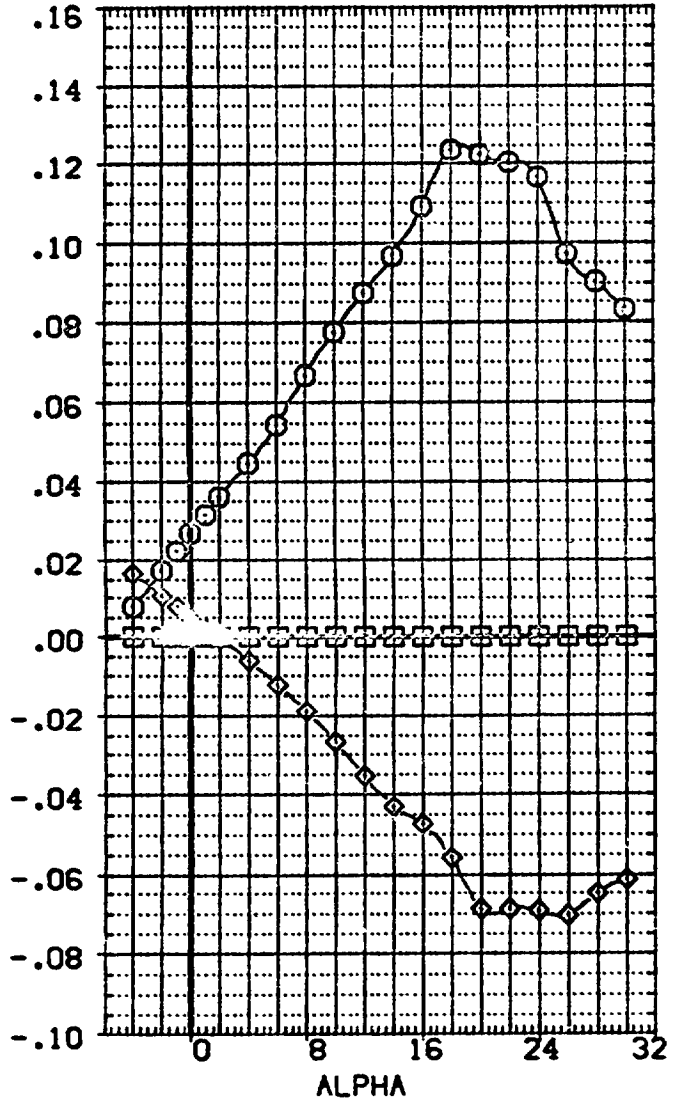


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

(A)MACH = .21

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(EDU055)	○	0A71C B16CS07J34F1V87 E18V3R3X10
(EDU049)	□	0A71C B16CS07J34F1V87 E18V3R3X10
(EDU053)	◇	0A71C B16CS07J34F1V87 E18V3R3X10

DELVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

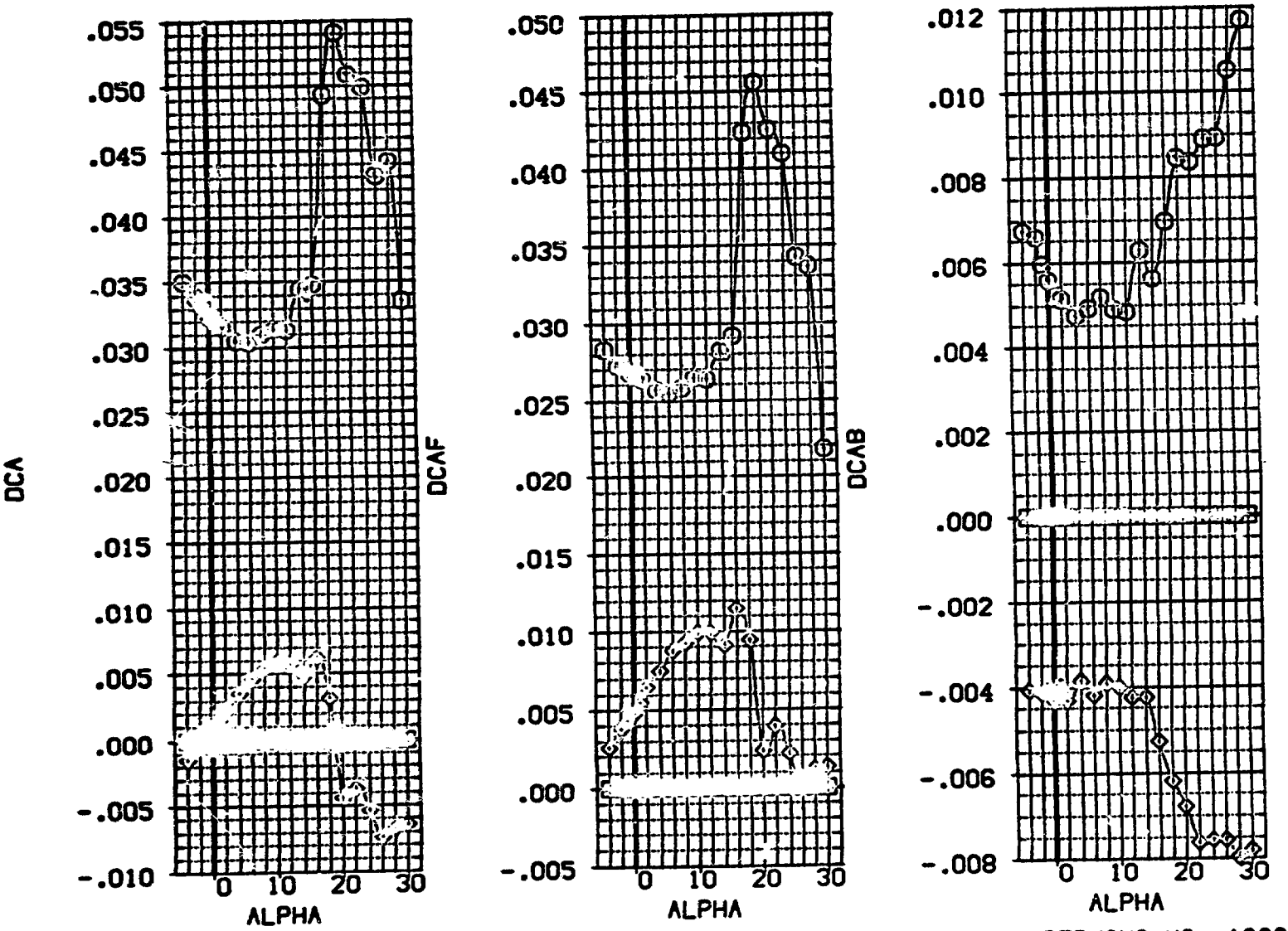


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

(A)MACH = .21

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(EDU055)	□	DA71C B16CSD7J34F1V87 E18V3R3X10
(EDU049)	◻	DA71C B16CSD7J34F1V87 E18V3R3X10
(EDU053)	◇	DA71C B16CSD7J34F1V87 E18V3R3X10

DELVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION:		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

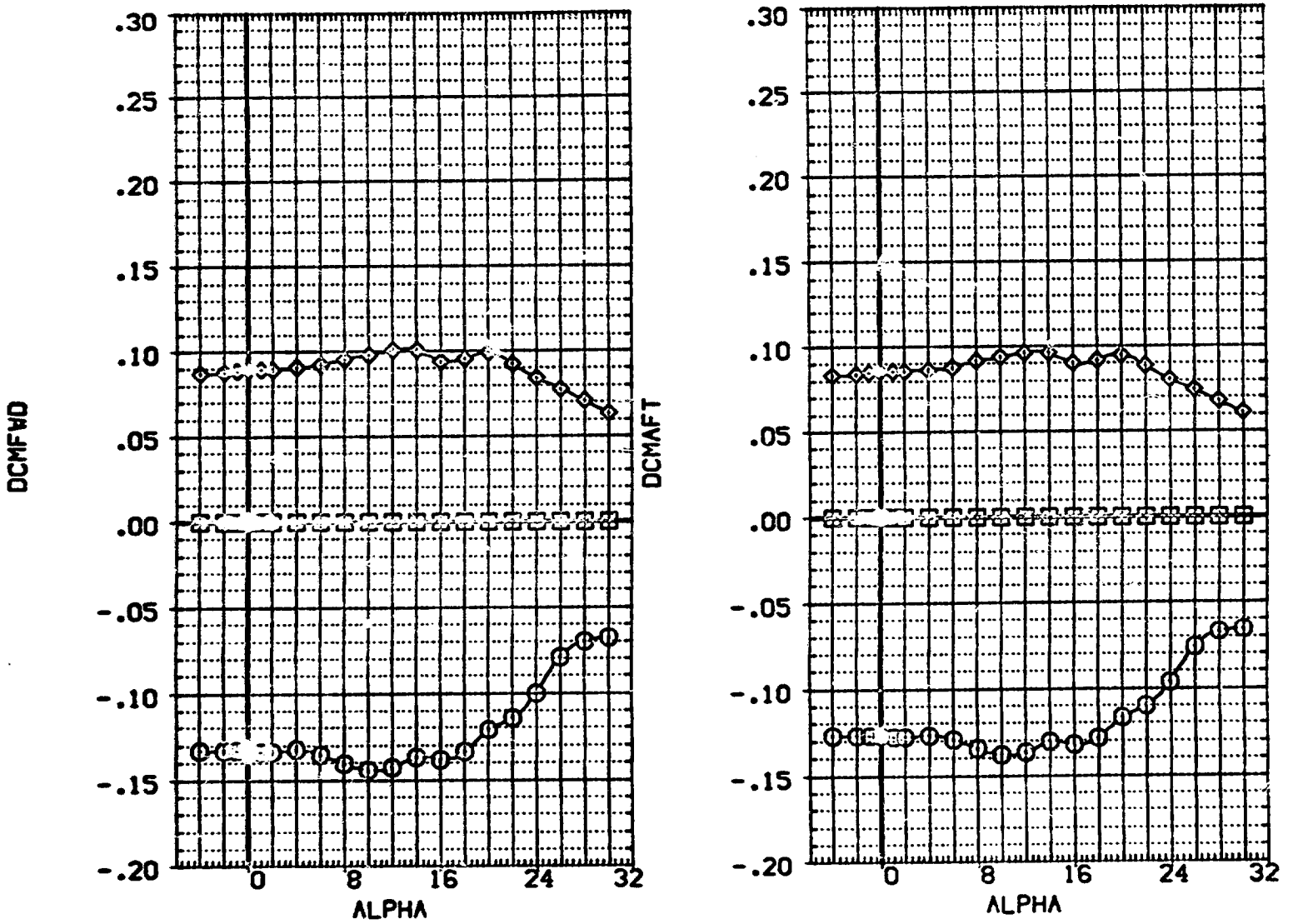


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XQ= 1060

(A)MACH = .21

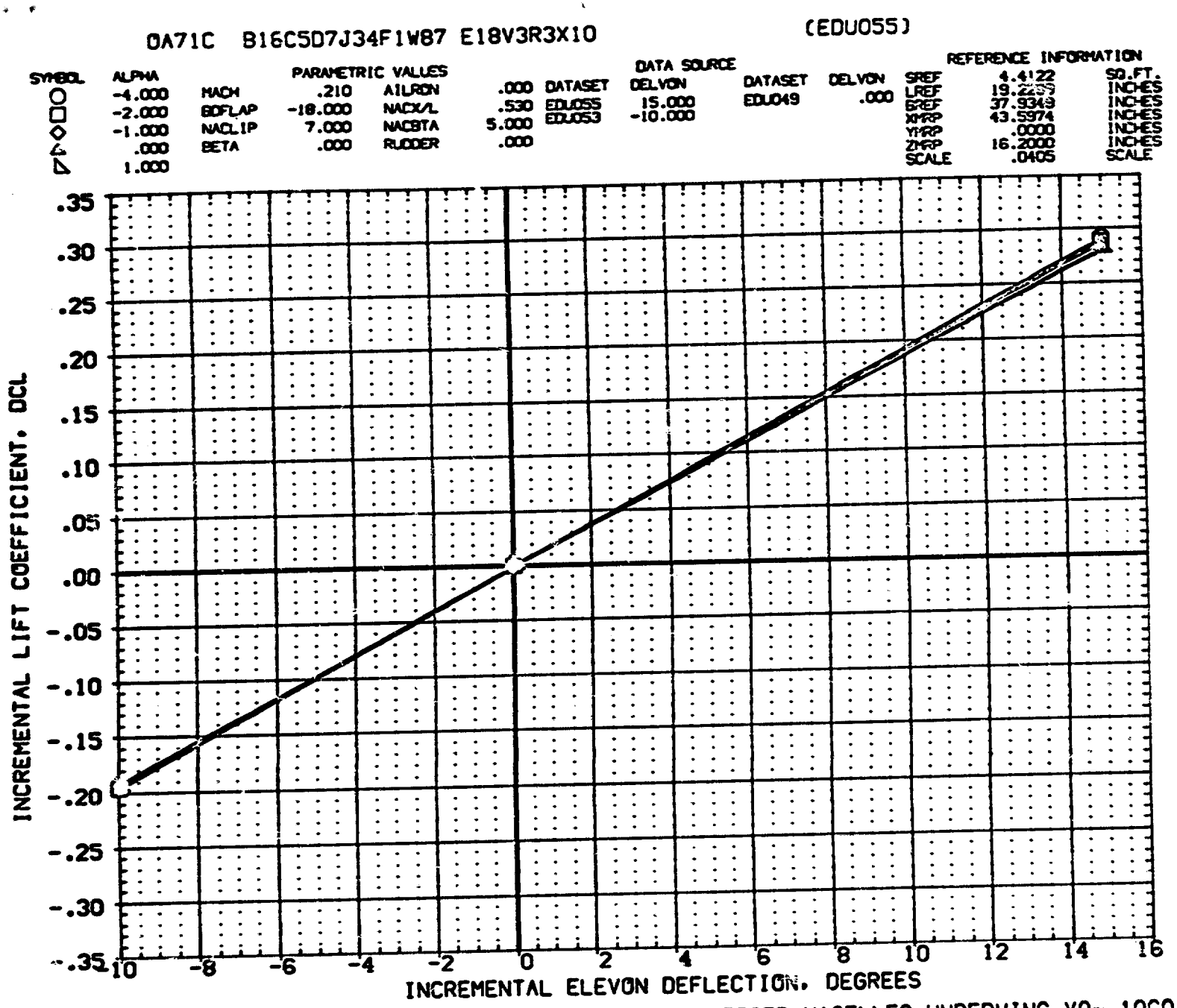


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	2.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	4.000	EDFLAP	-19.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2299	INCHES
◇	6.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	8.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	10.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

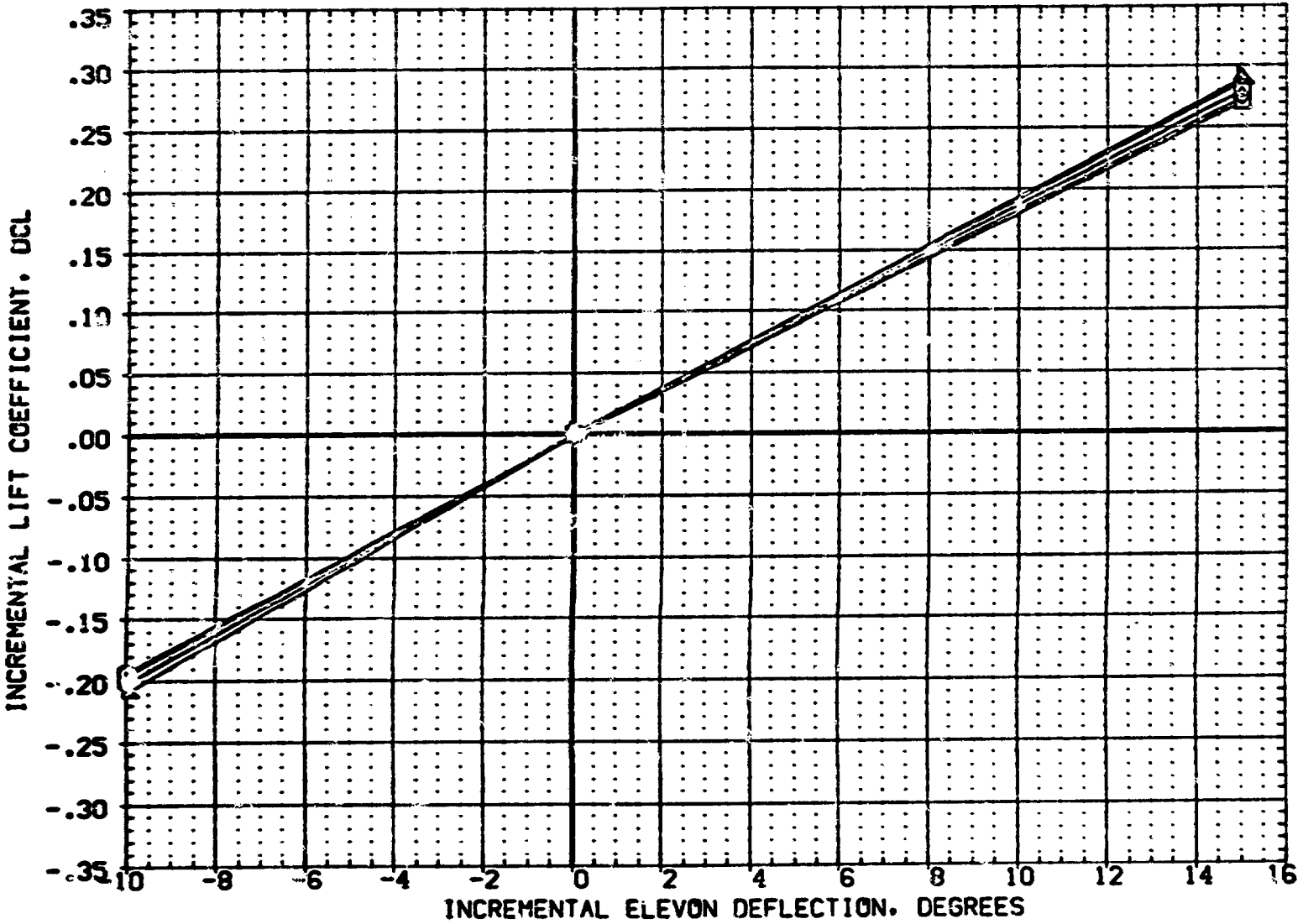


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	BOFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2299	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

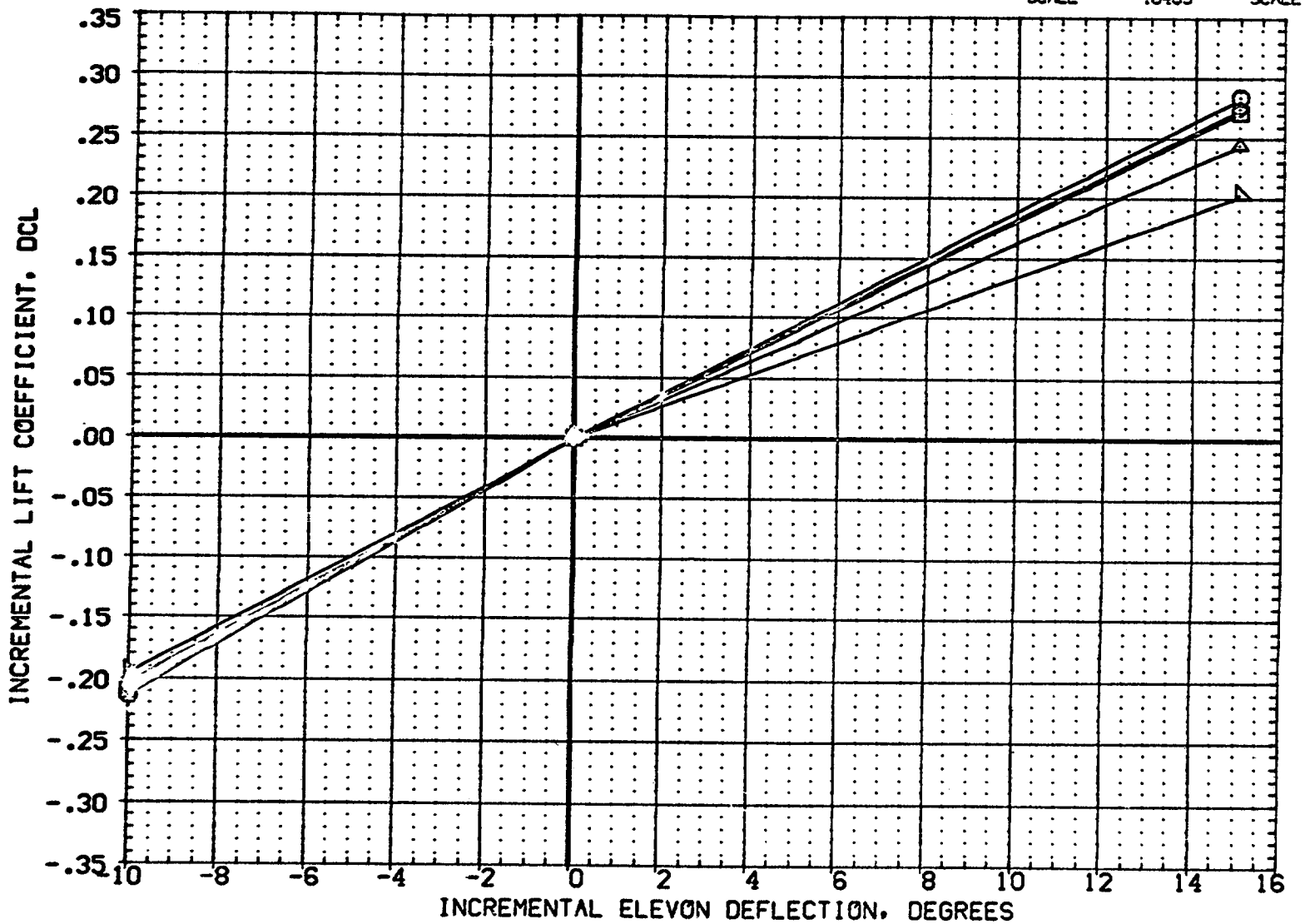


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	BOFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2293	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

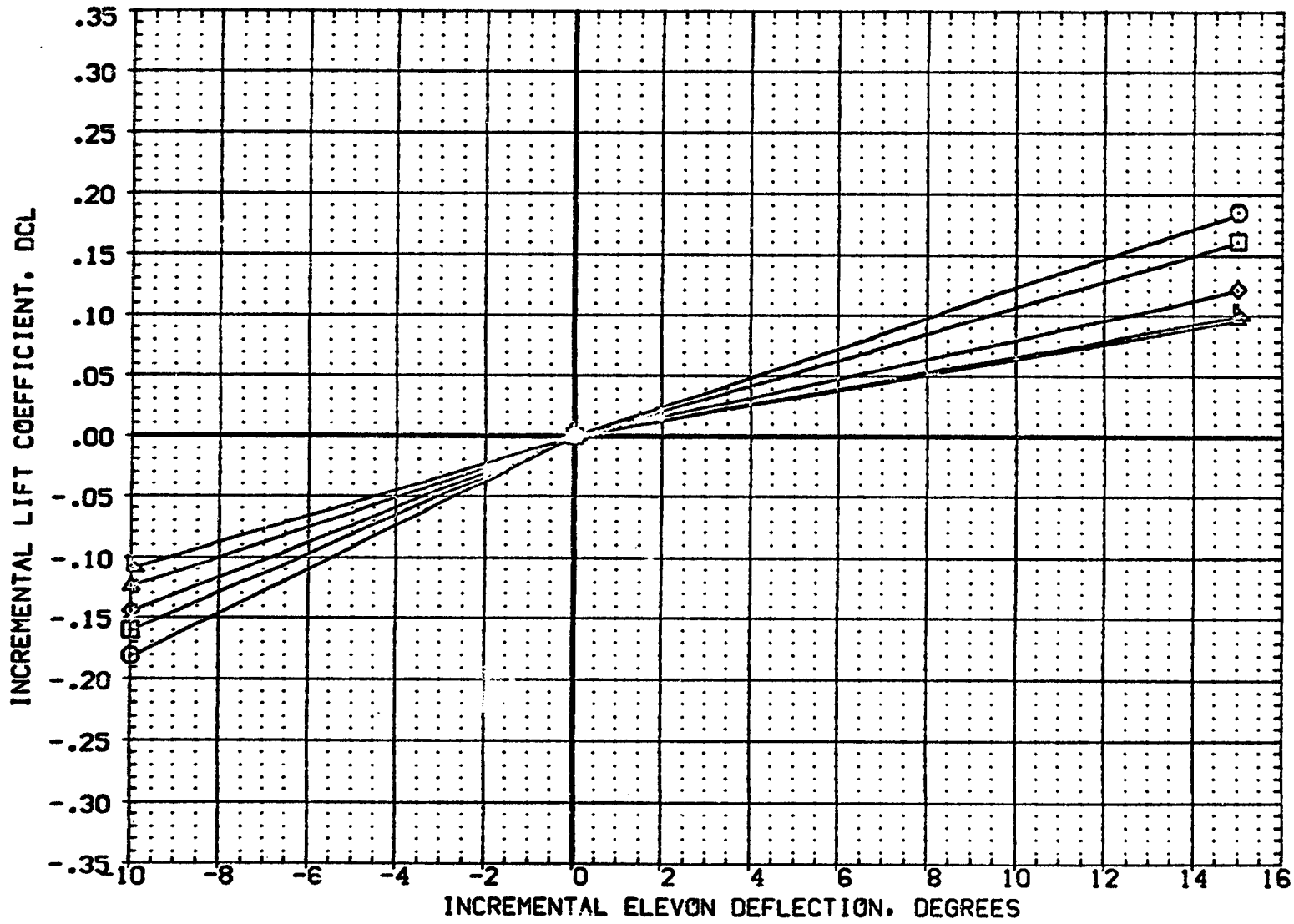


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BCFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

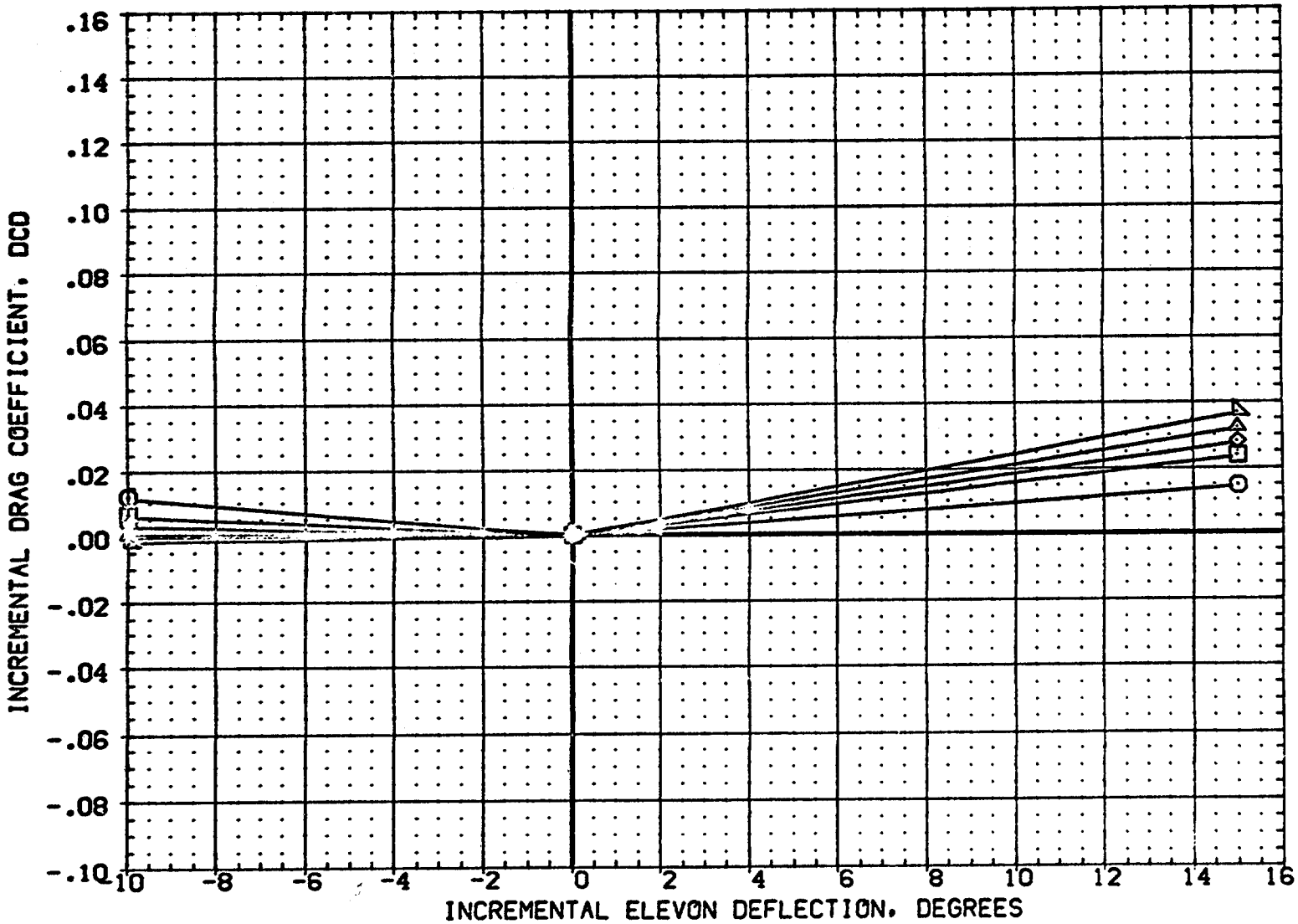


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

0A71C B16C5D7J34F1W87 E18V3R3X1C (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	2.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	4.000	BDFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2299	INCHES
◇	6.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	8.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
◁	10.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

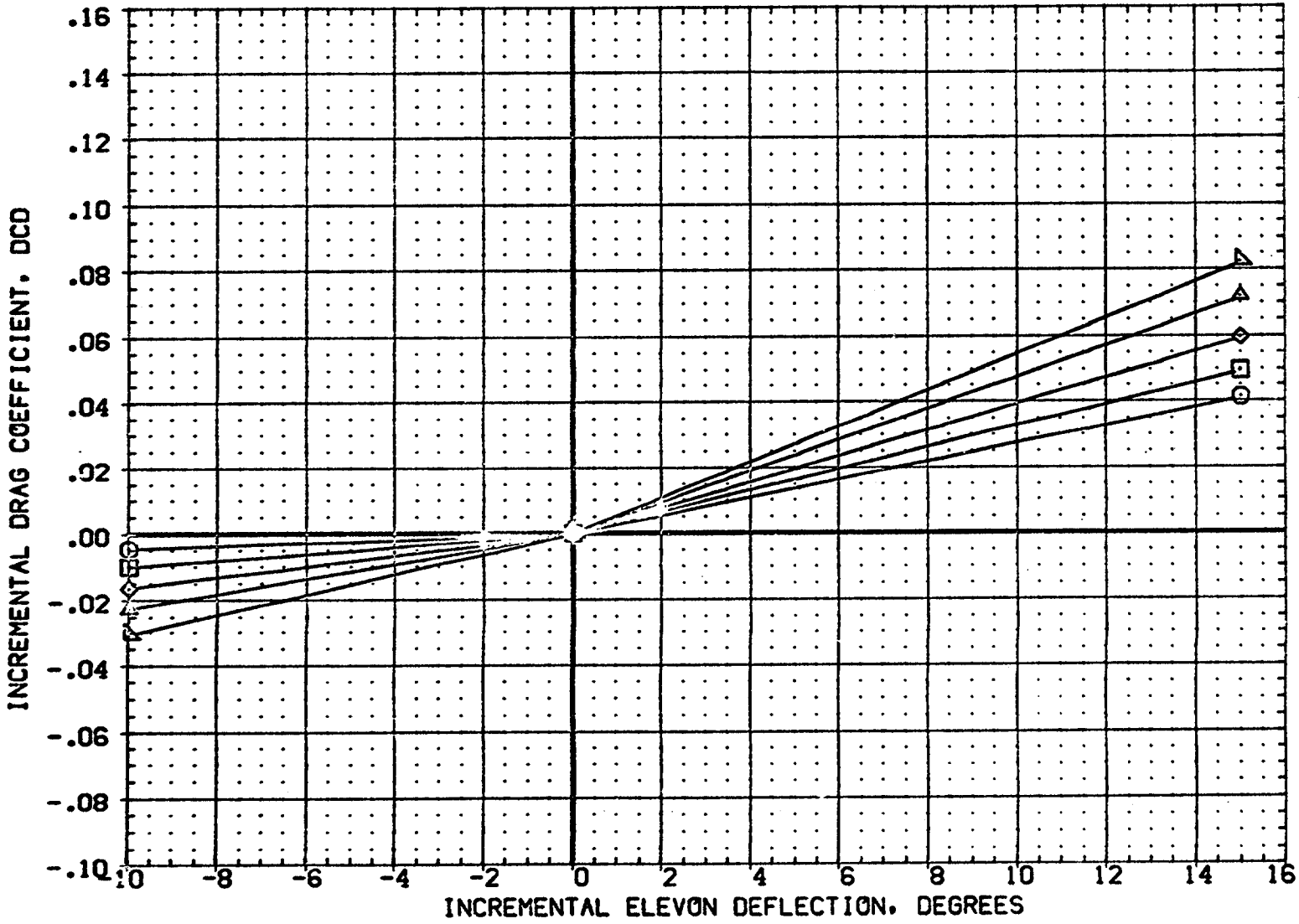


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	BOFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2299	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
◺	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

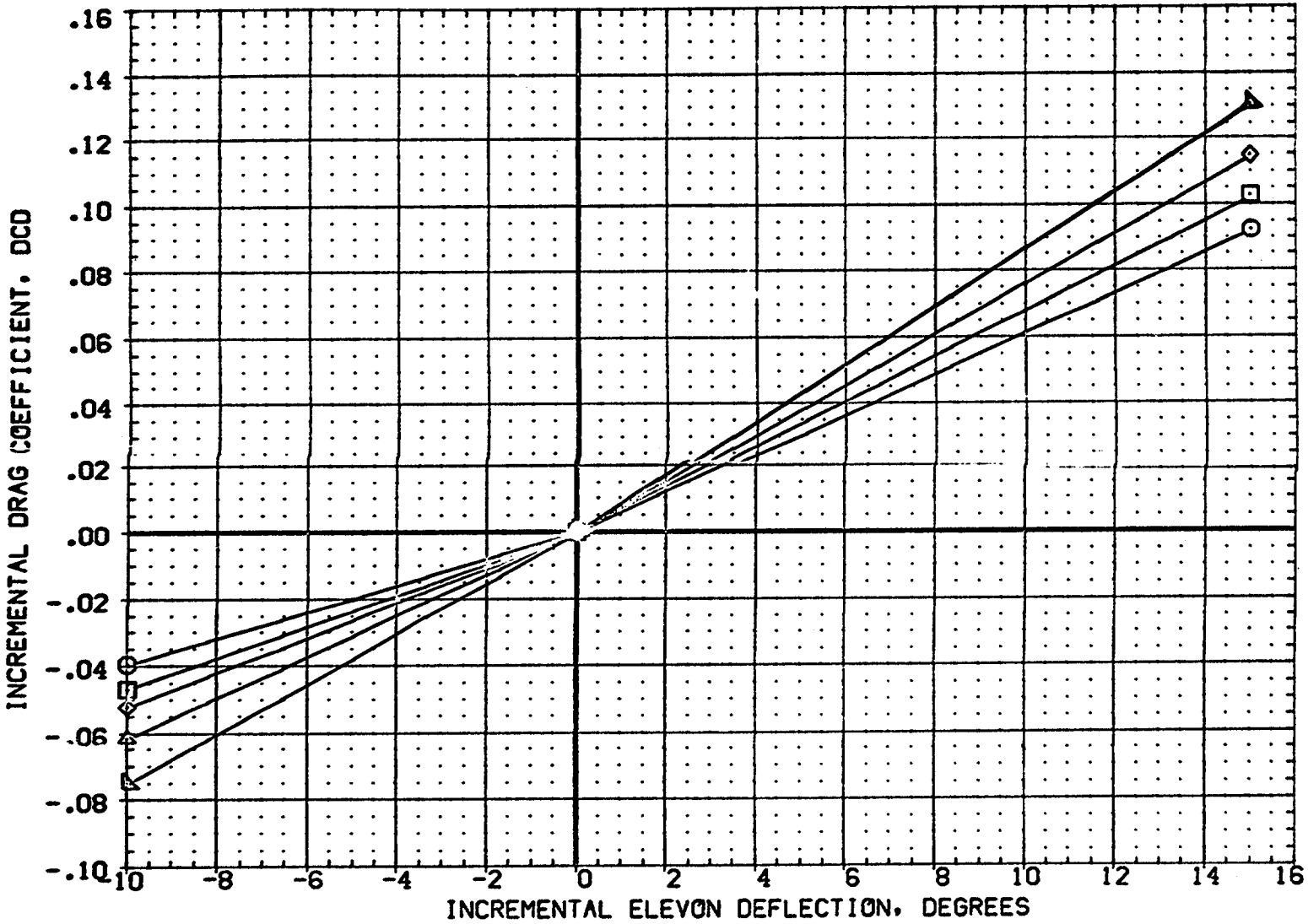


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	BOFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2293	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

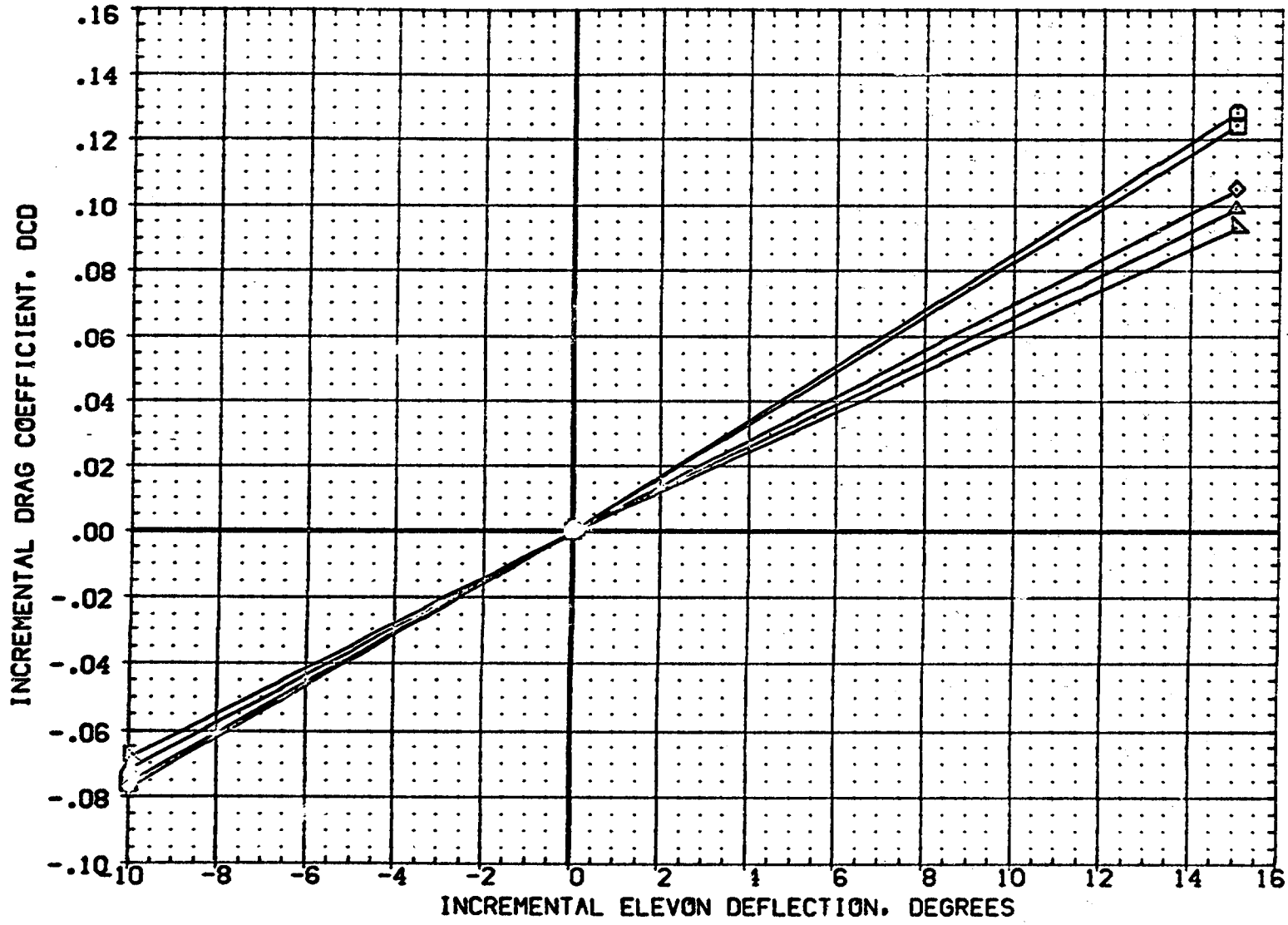


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BOFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
◺	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

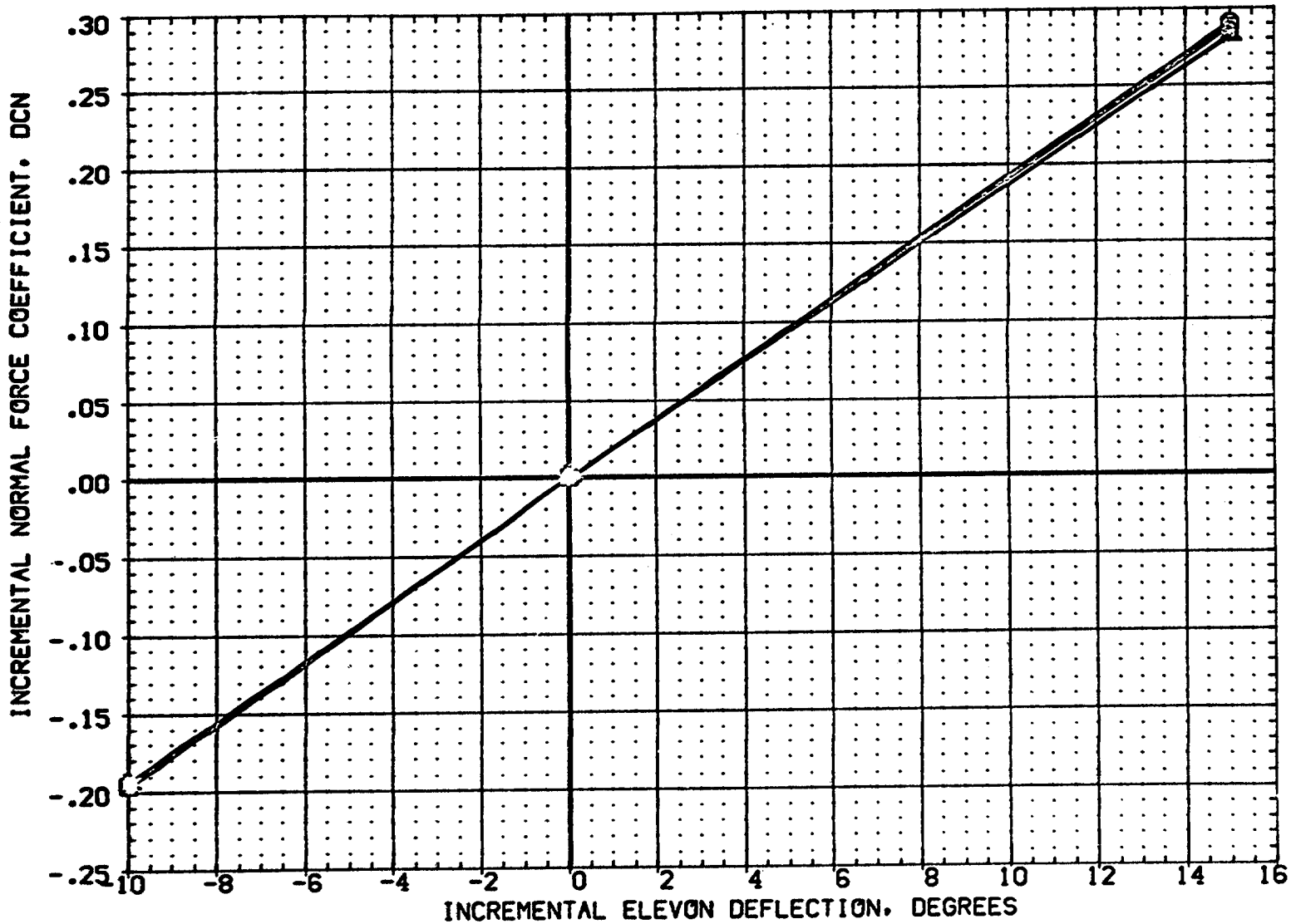


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

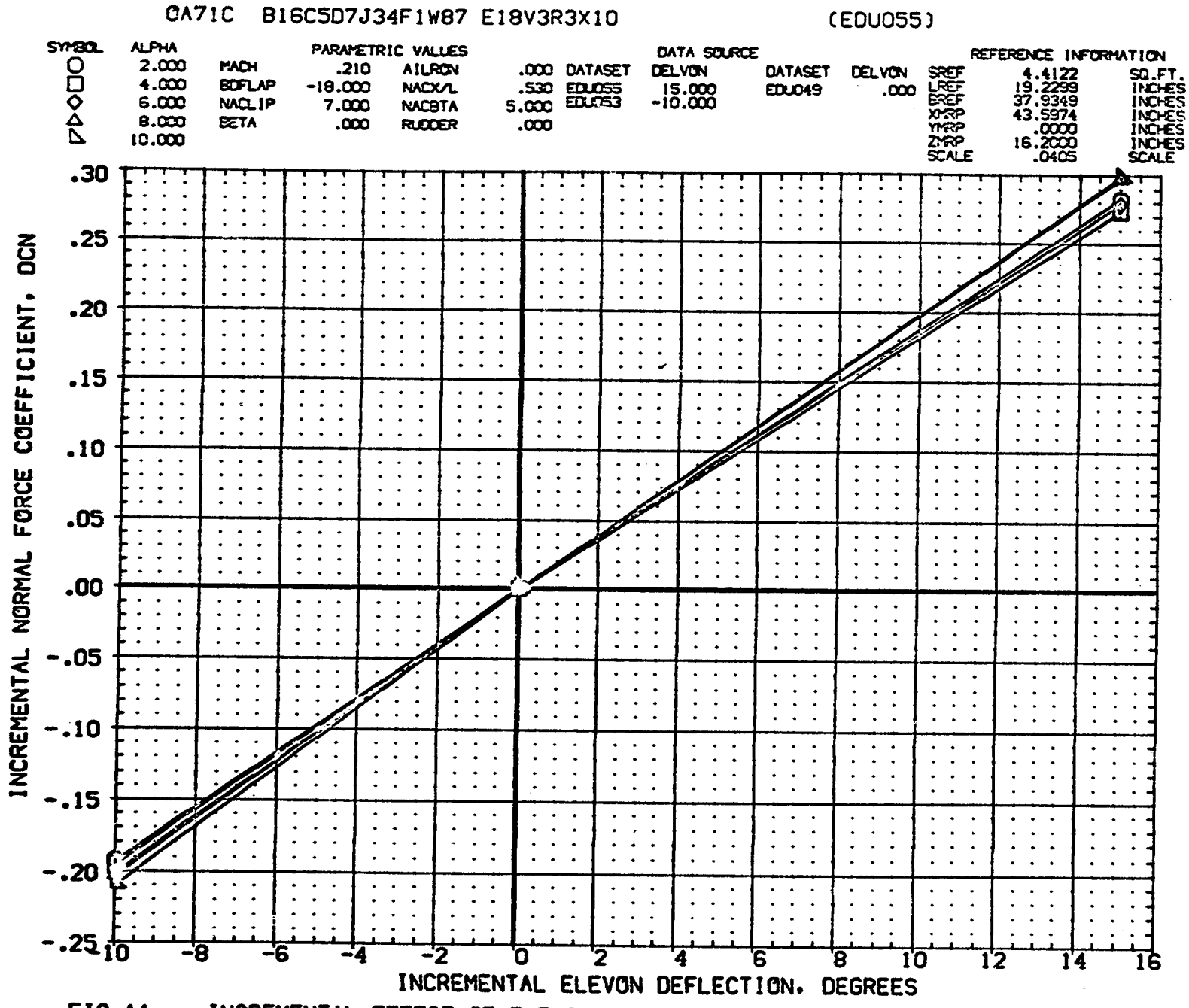


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

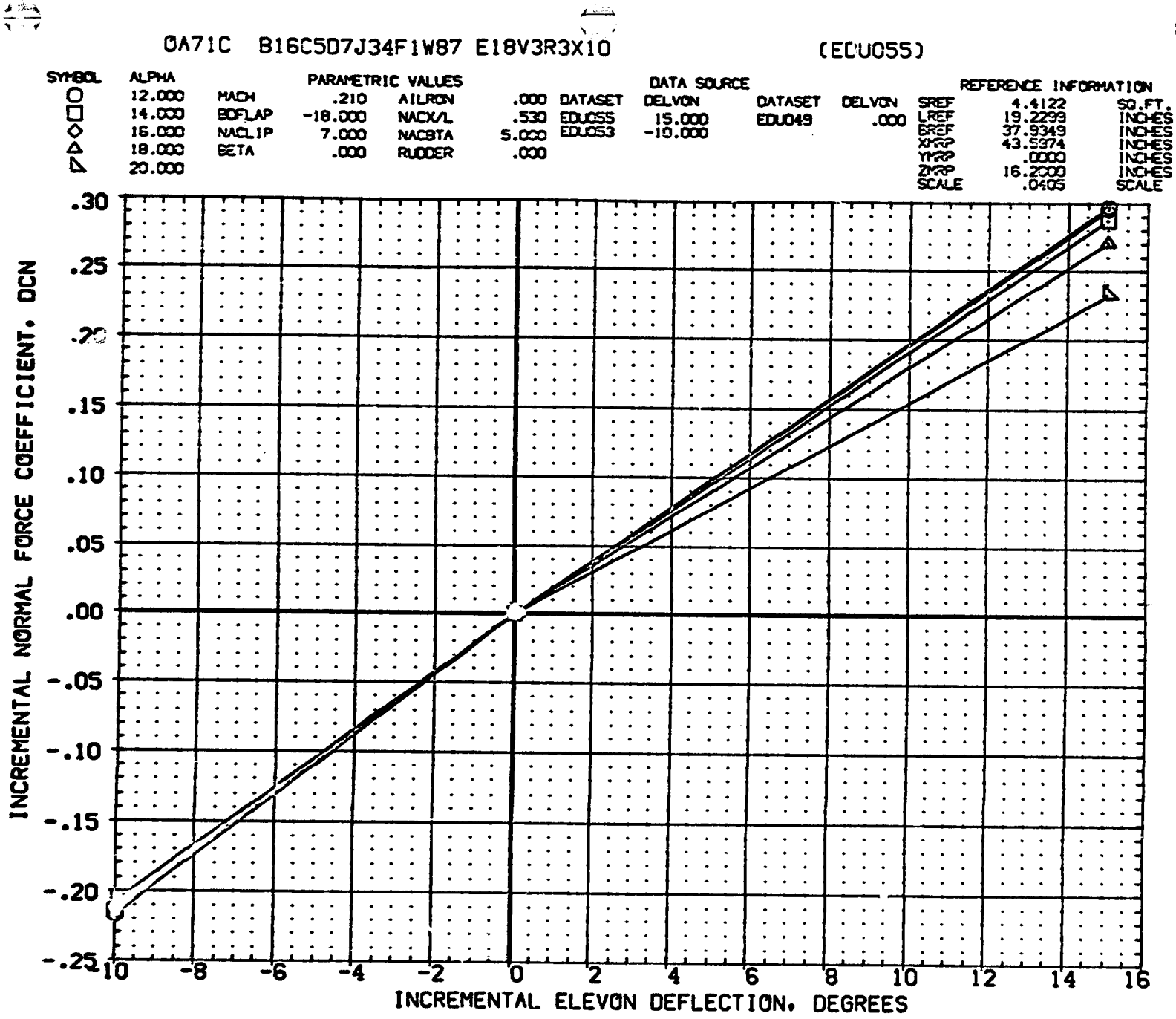


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XQ= 1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	BOFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2299	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

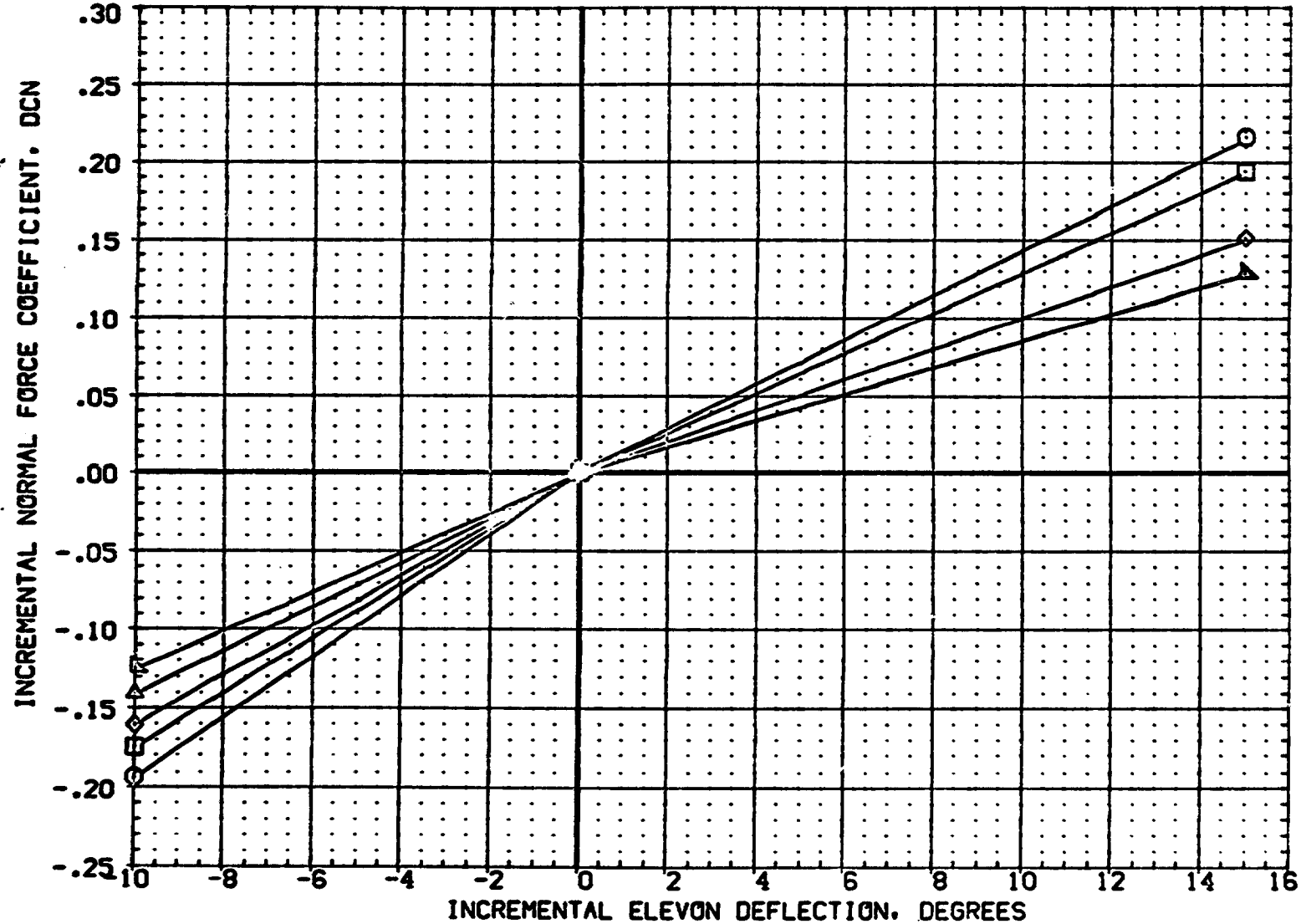


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

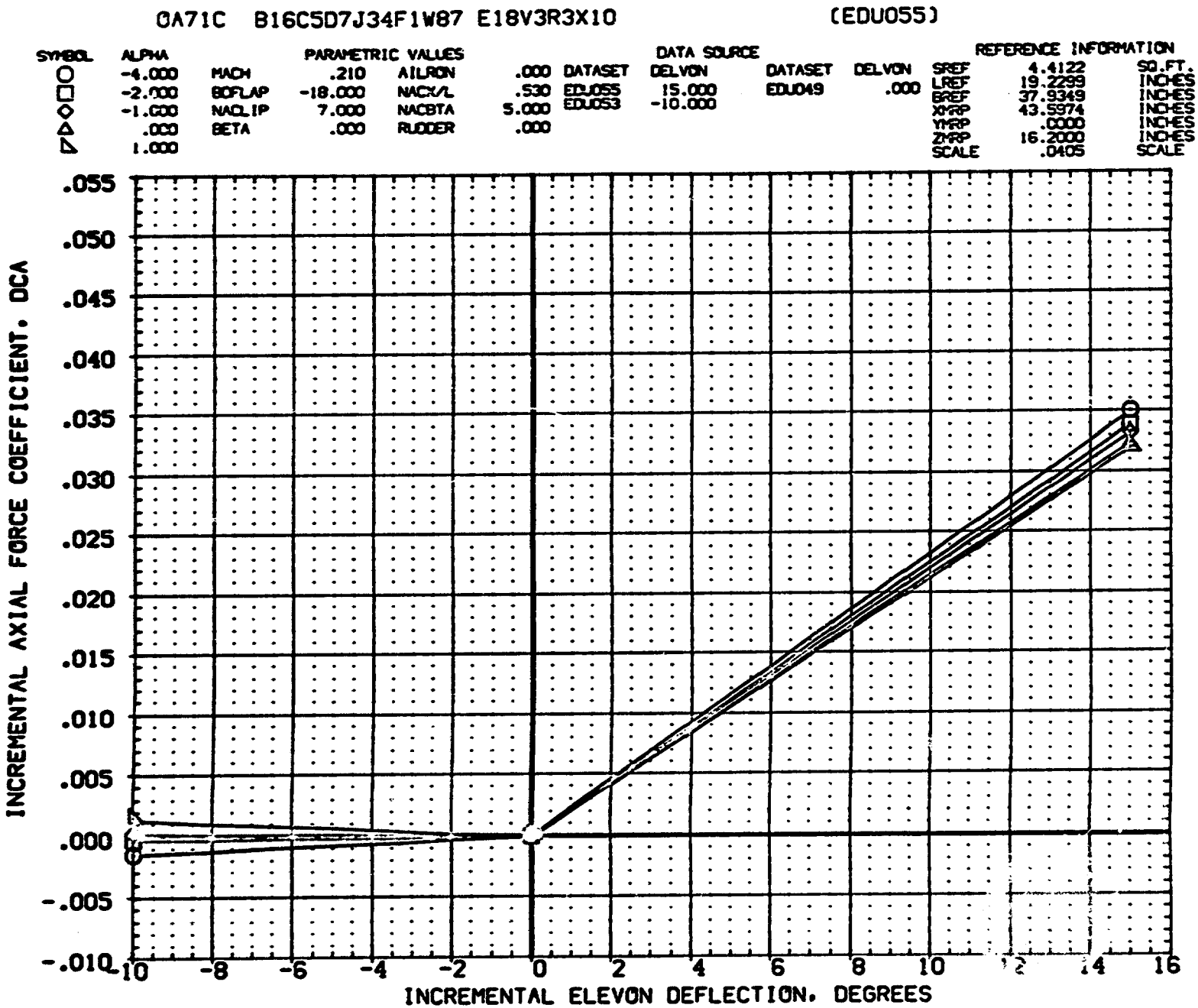


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

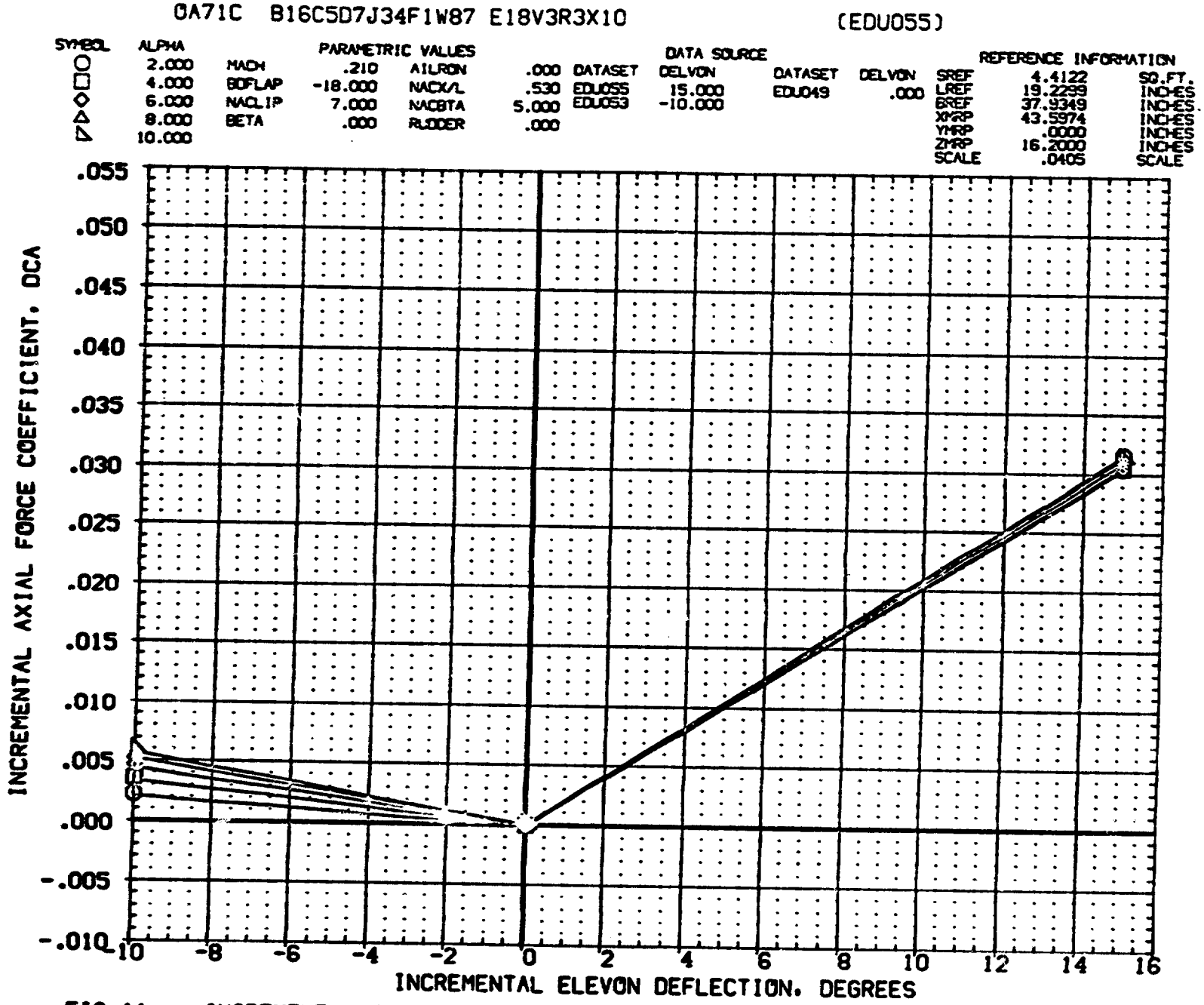


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

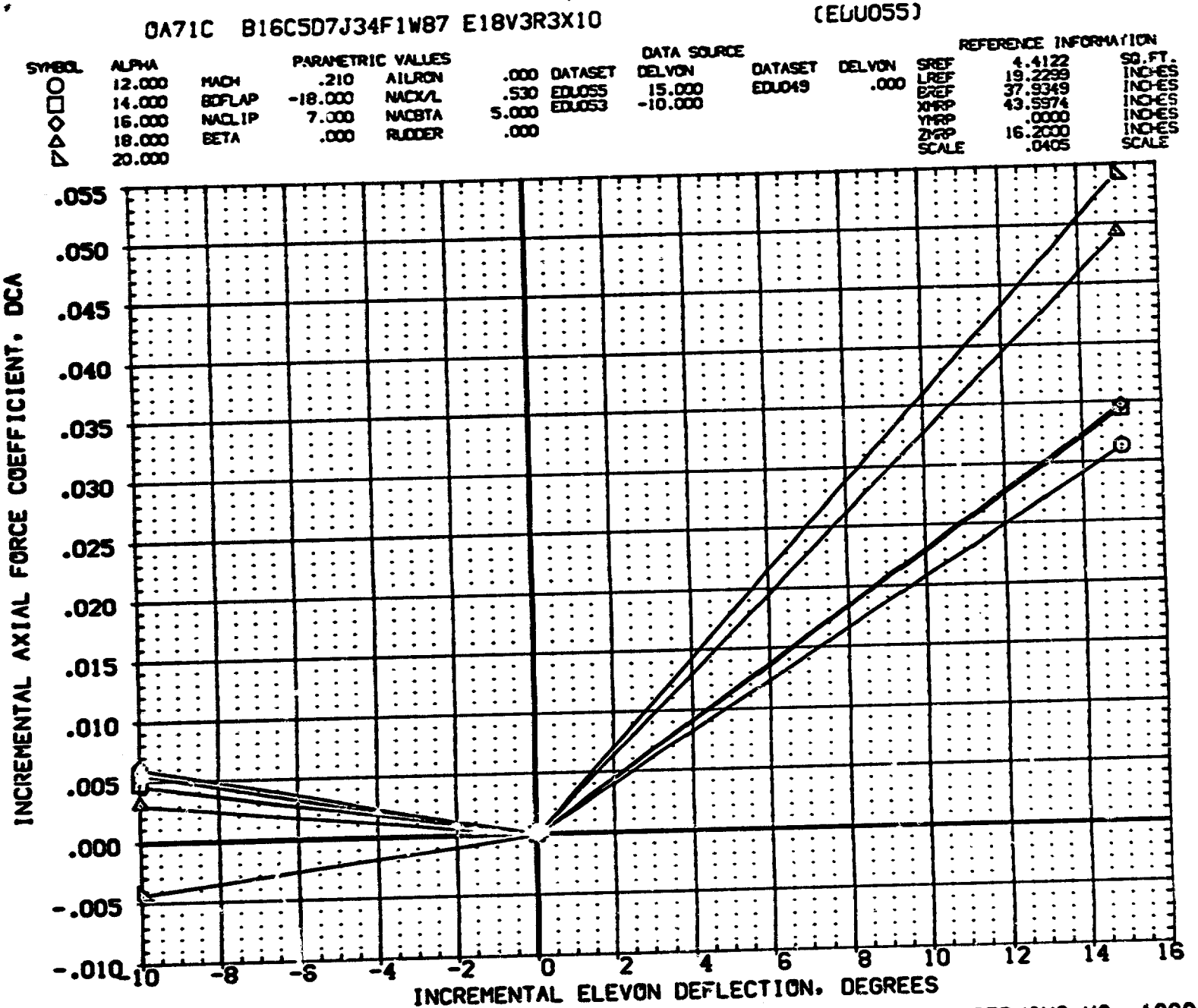


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

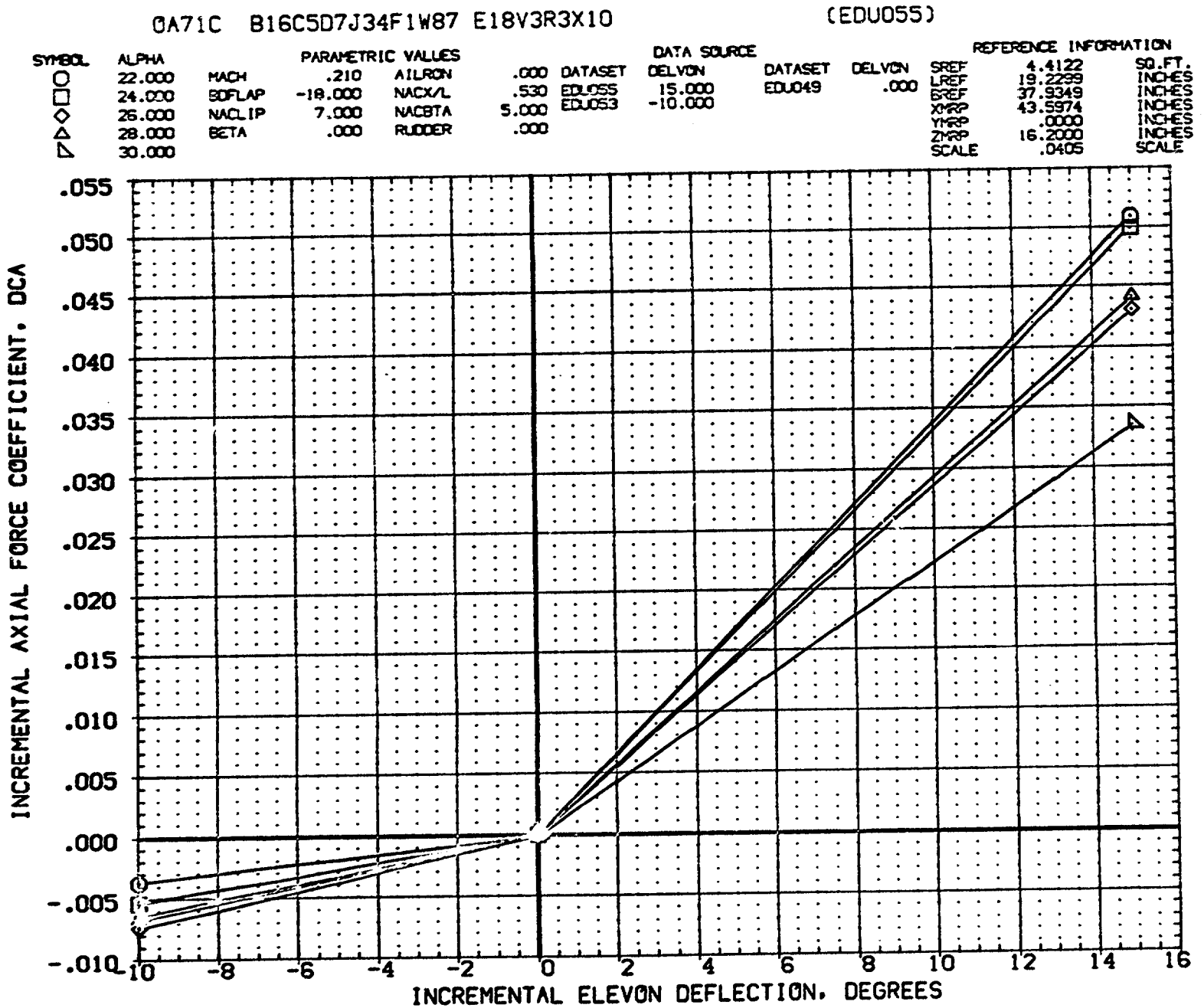


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (EDU055)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BDFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

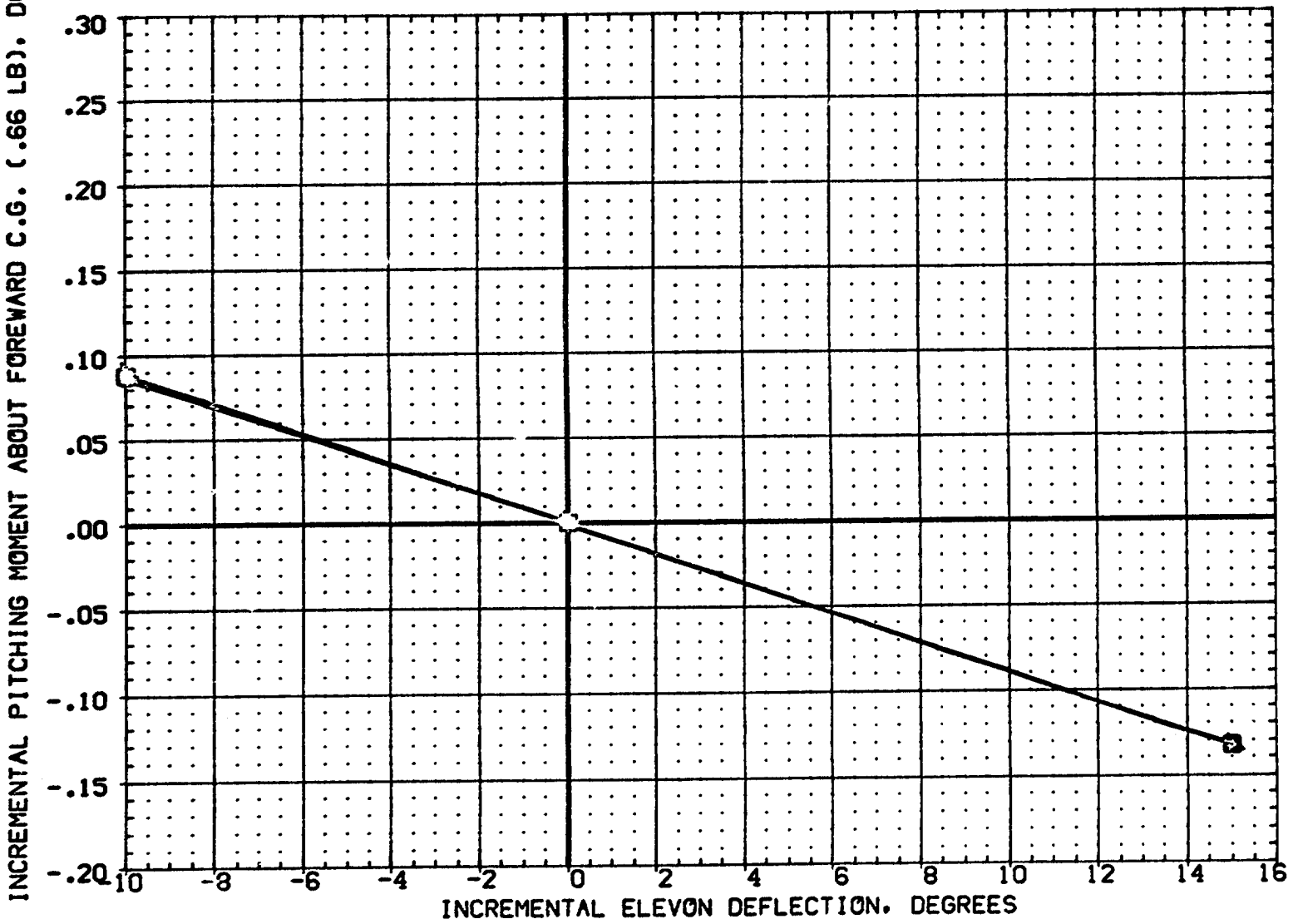


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

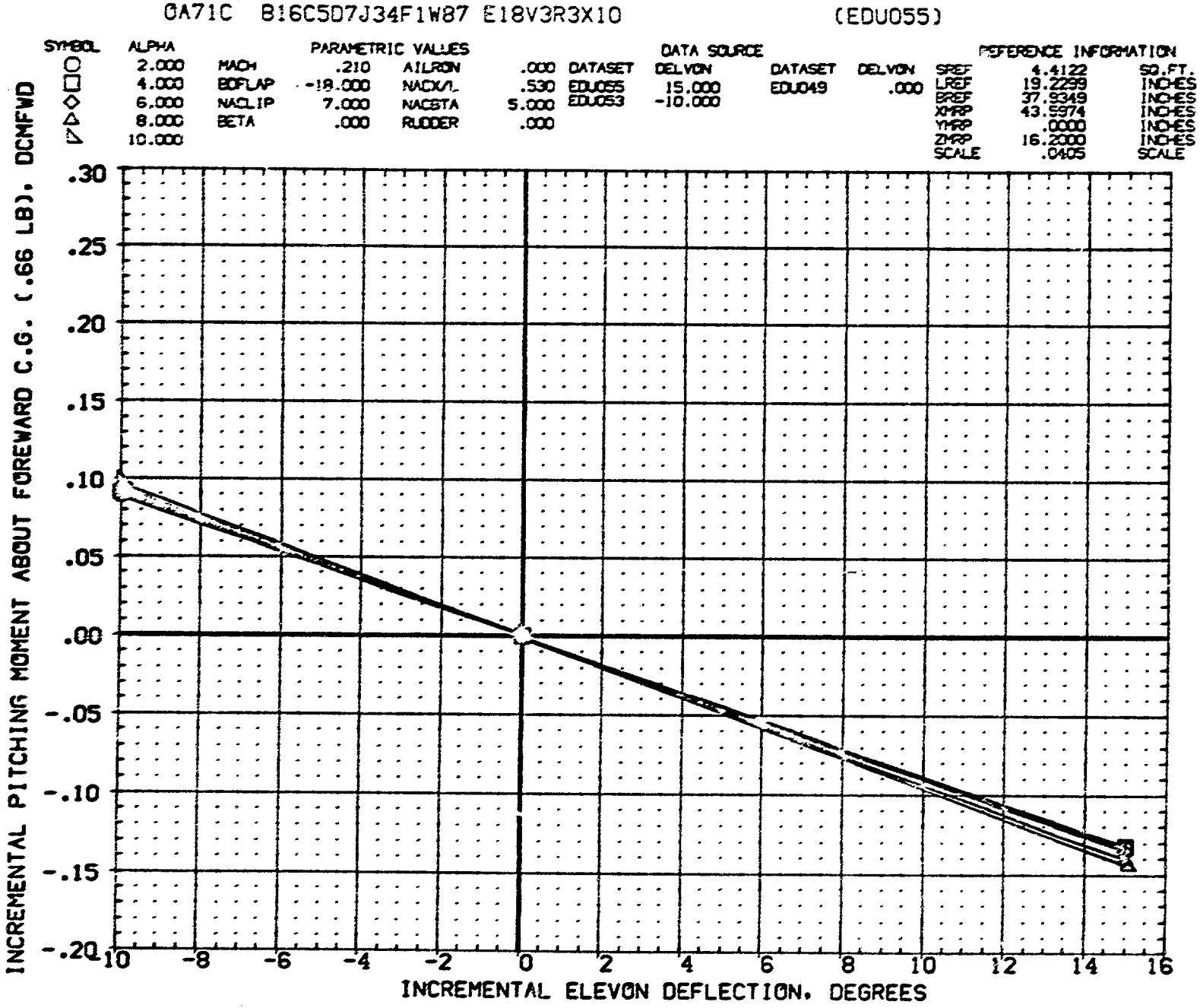


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

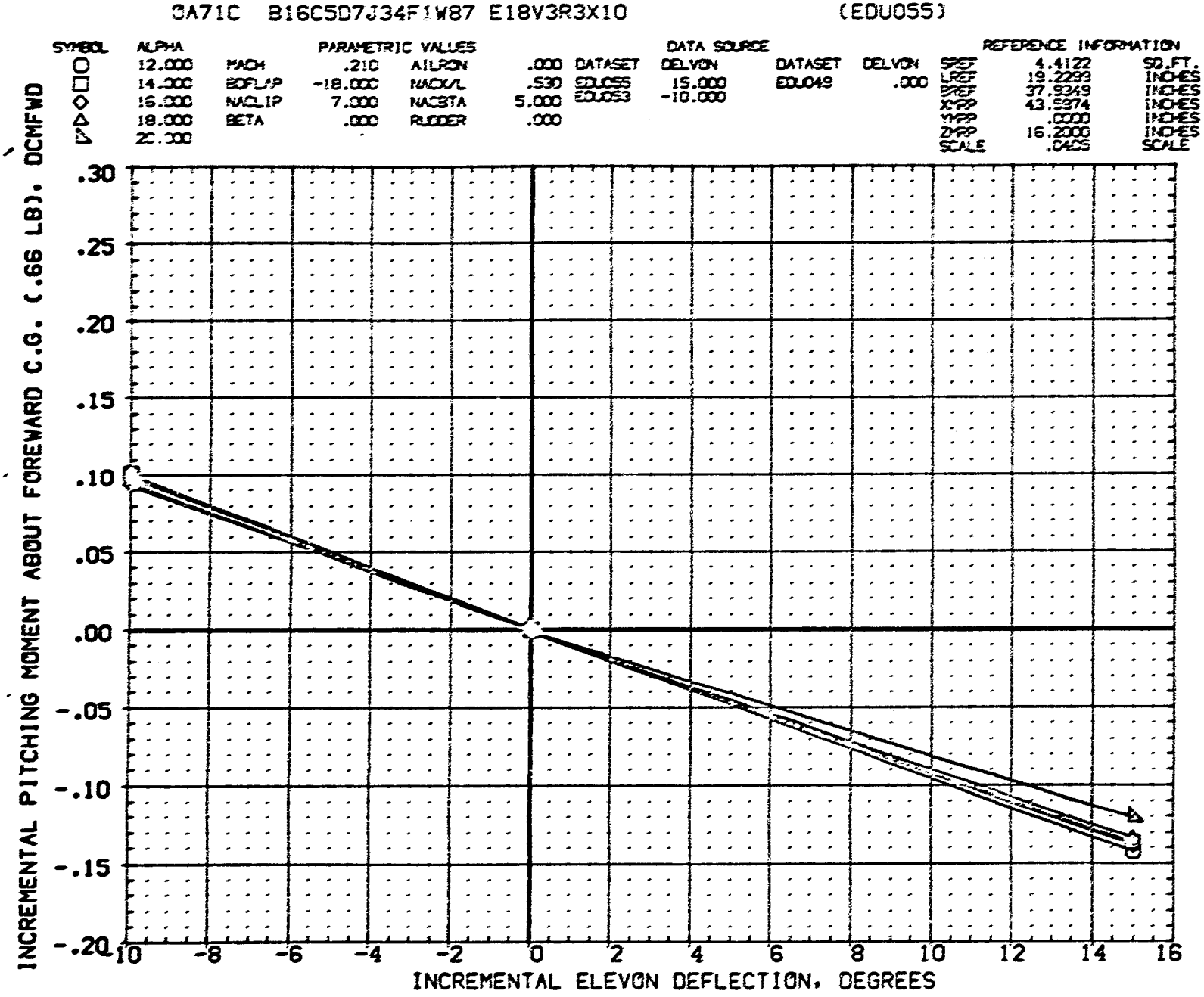


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	BOFLAP	-18.000	NACX/L	.530	EDU055	15.000	EDU049	.000	LREF	19.2299	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU053	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

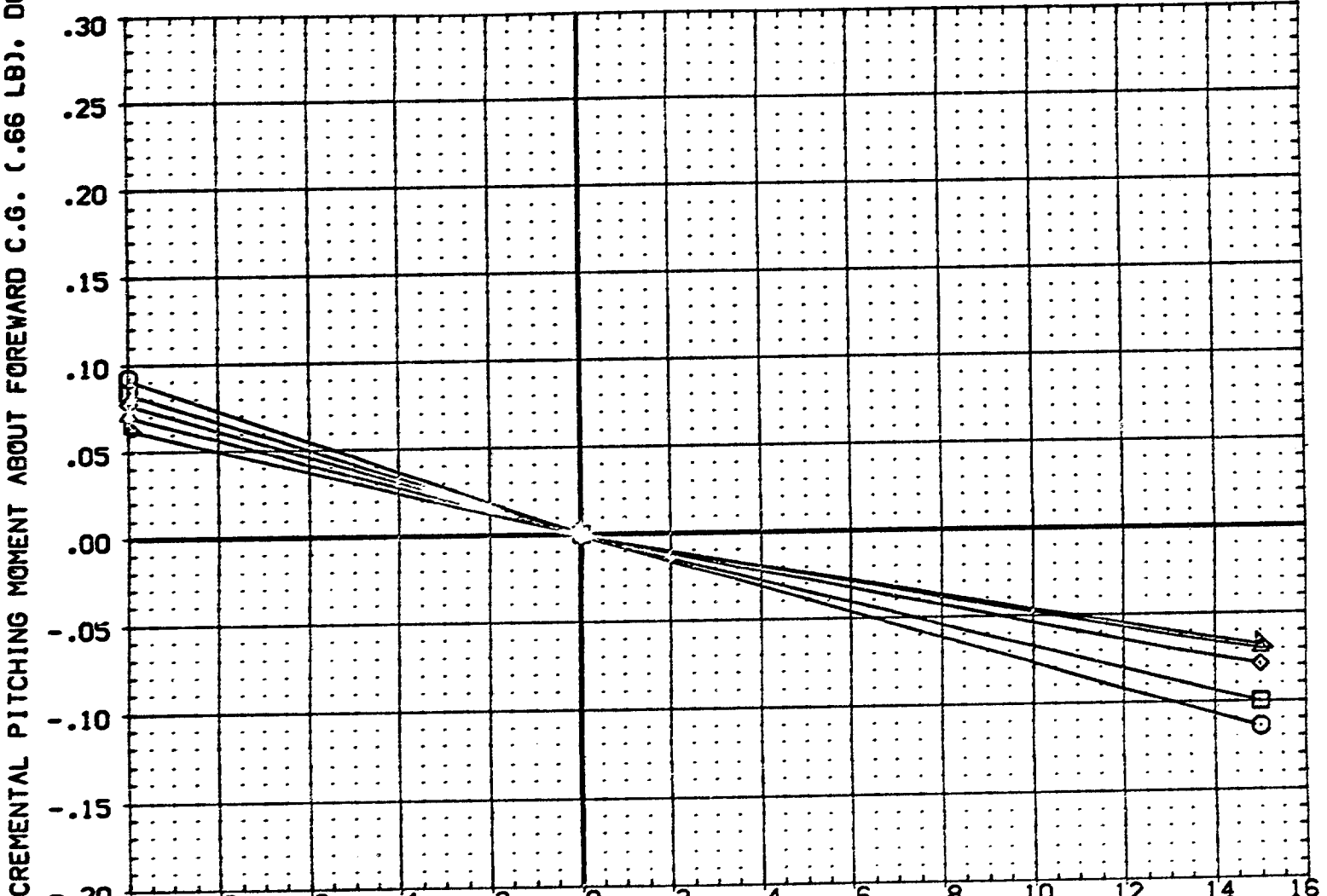


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

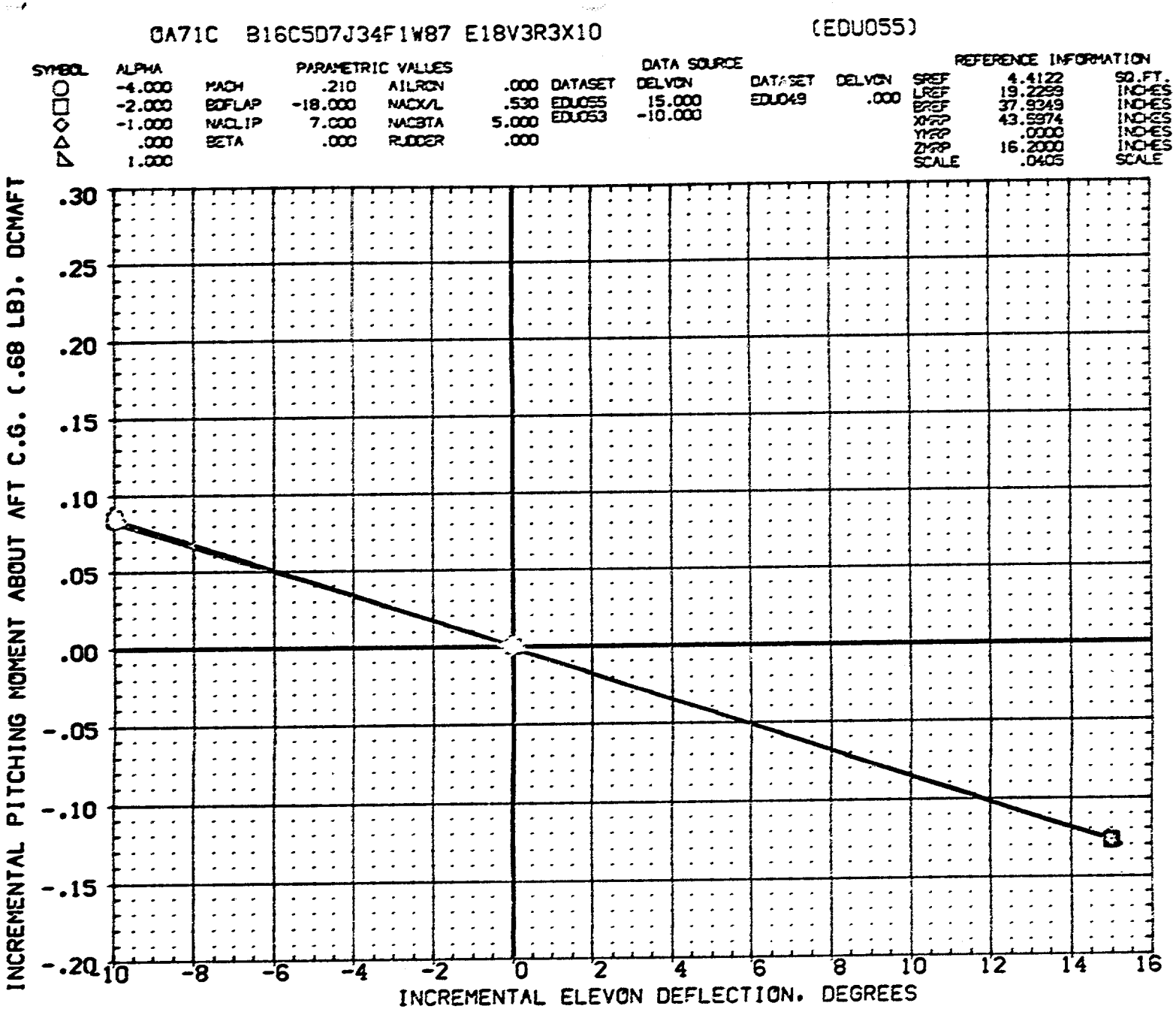


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

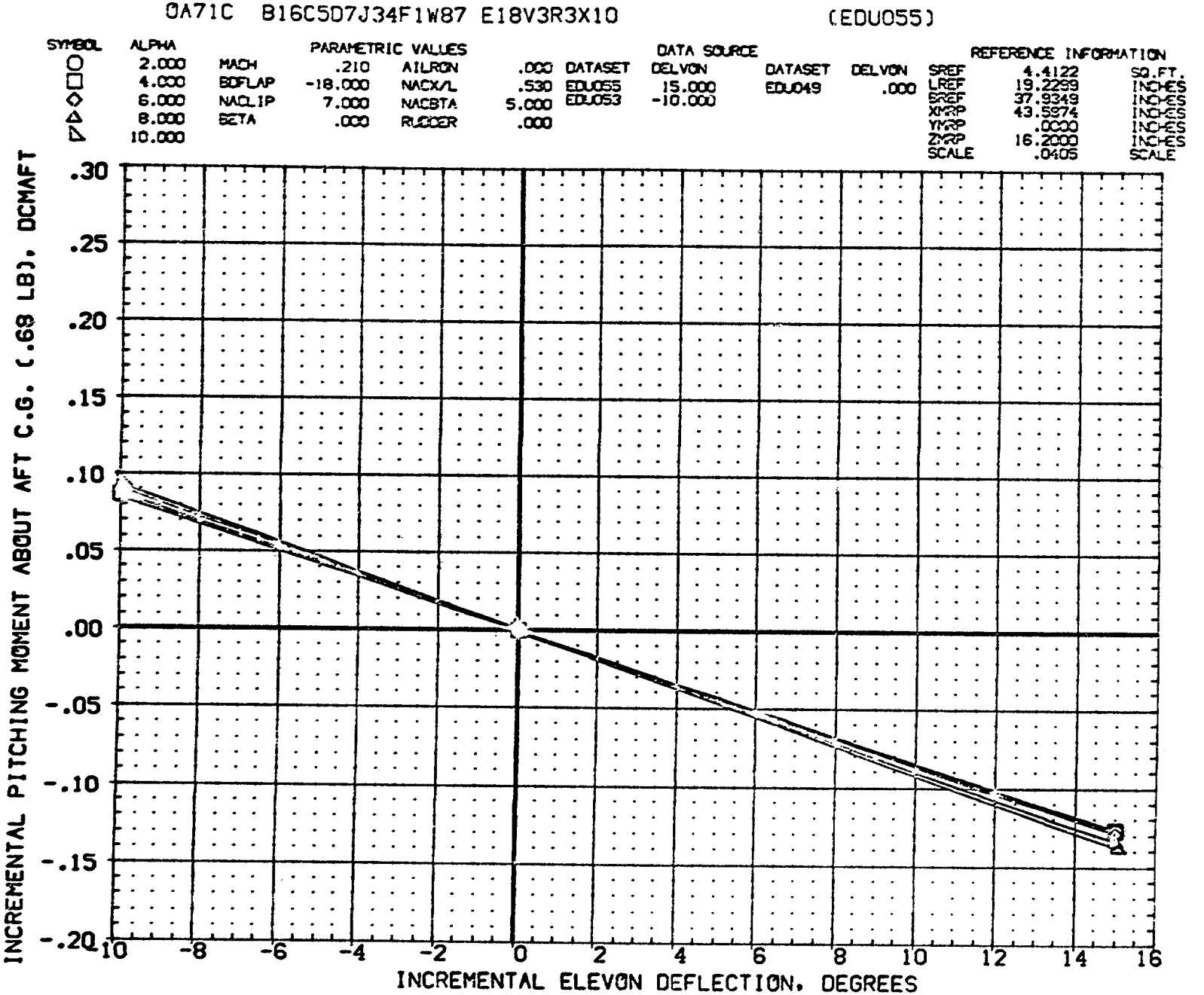


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

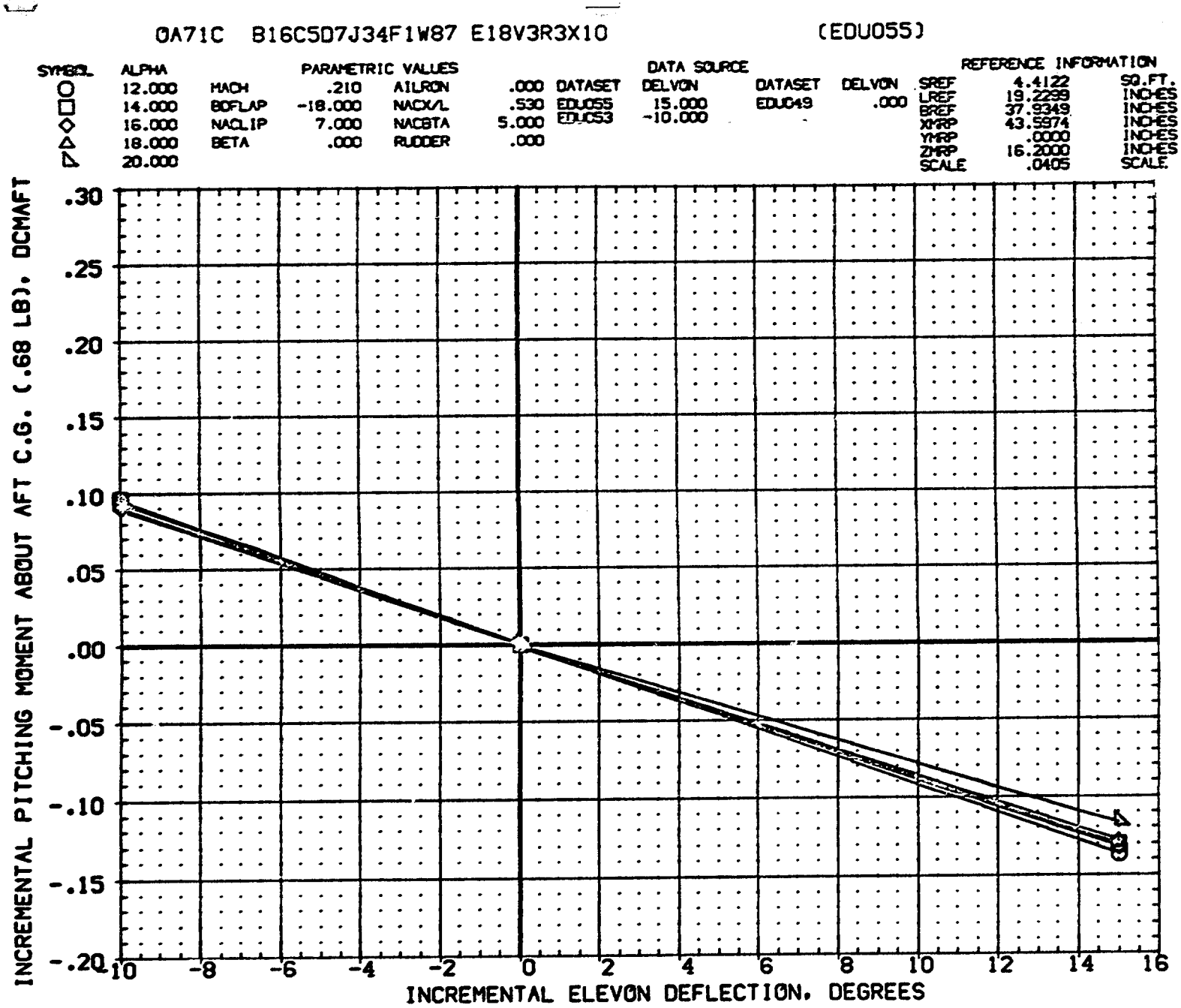


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

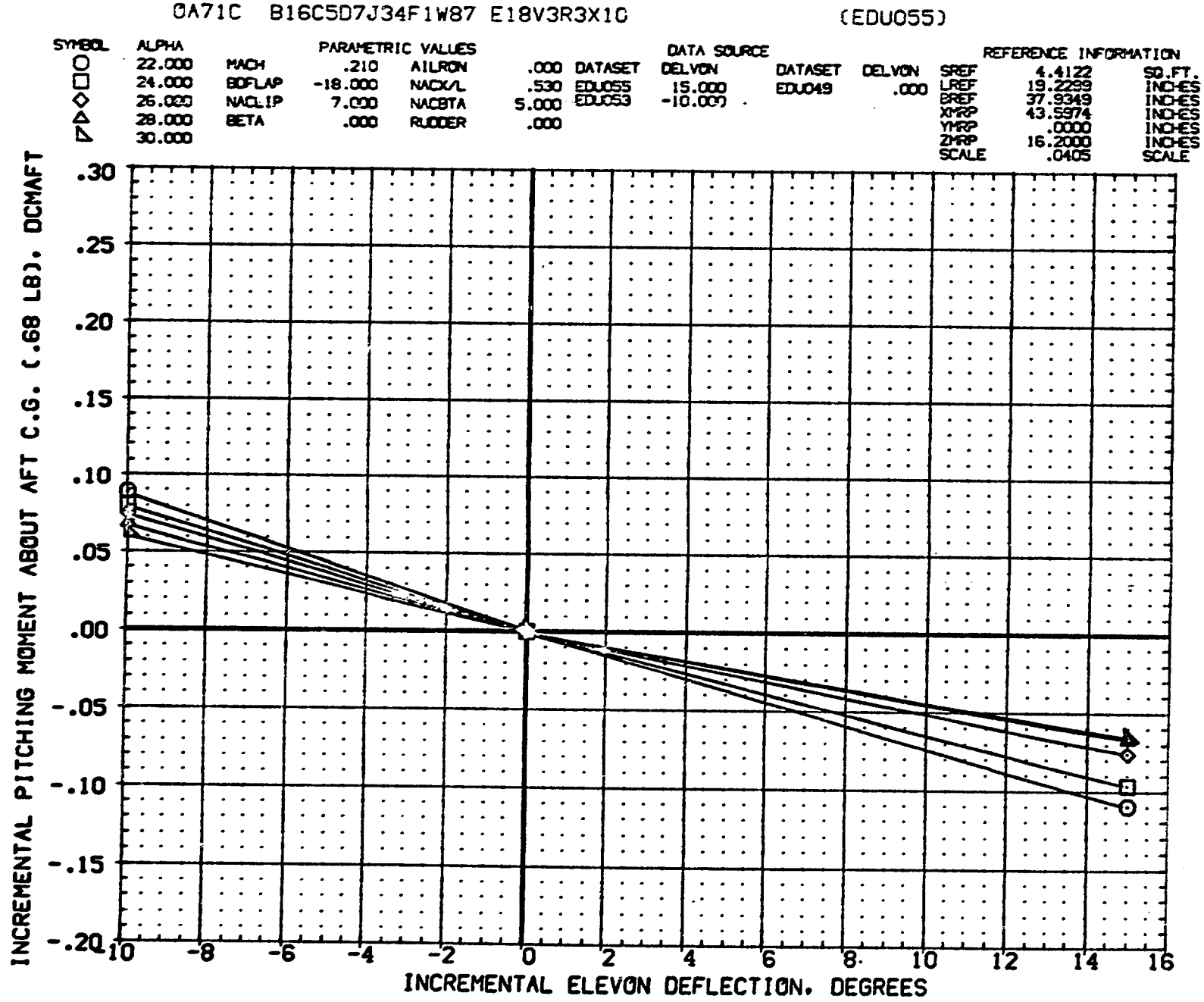


FIG 11 INCREMENTAL EFFECT OF ELEVONS - CLUSTERED NACELLES UNDERWING XO= 1060

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACSTA
(ADU061)	○	CA71C B16CSD7J35F1V87 E18V3R3X10	15.000	.530	7.000	5.000
(ADU058)	□	CA71C B16CSD7J35F1V87 E18V3R3X10	.000	.530	7.000	5.000
(ADU062)	◇	CA71C B16CSD7J35F1V87 E16V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

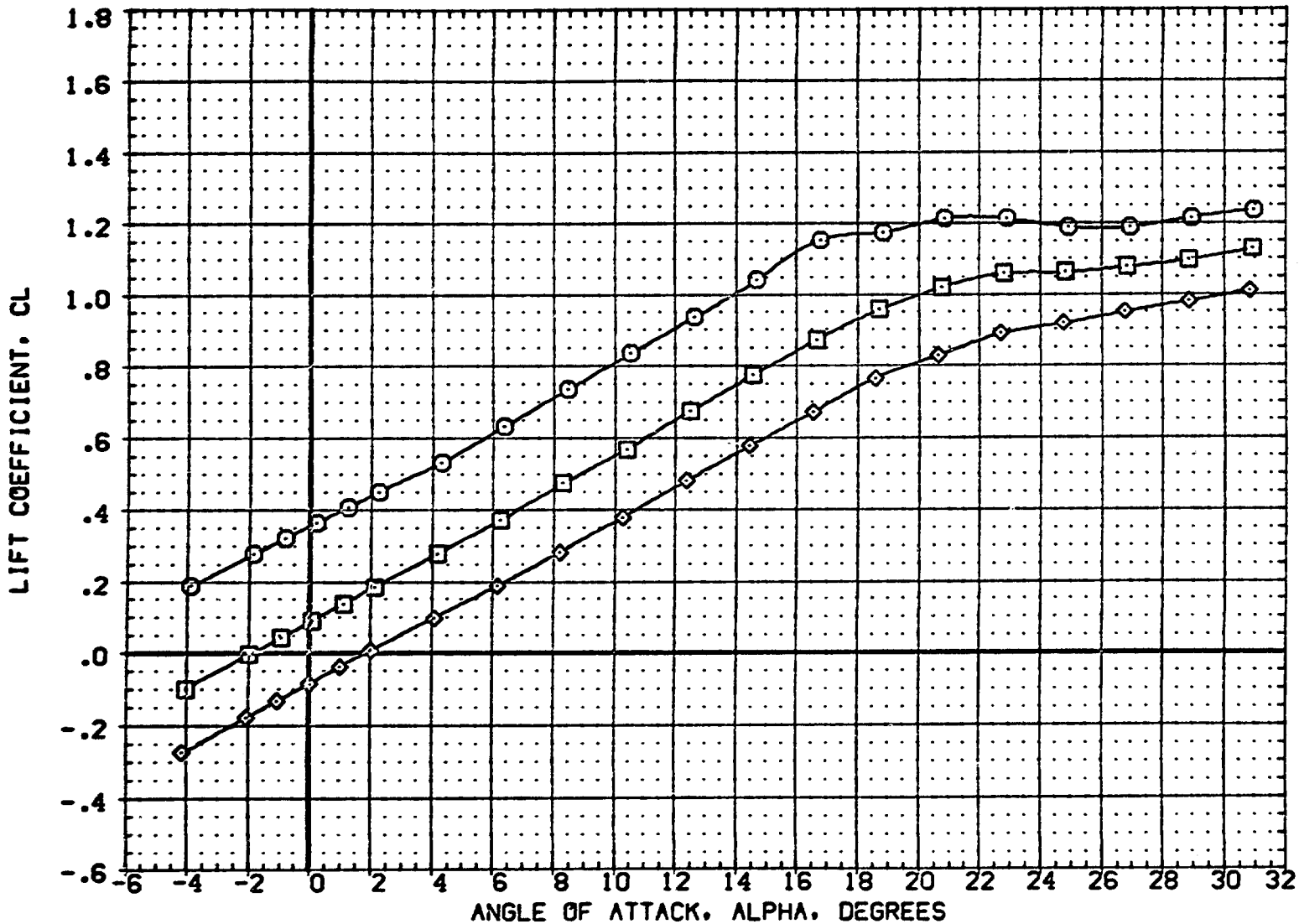


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ADJ061)	○	CA71C B16C507J35F1V87 E18V3R3X10
(ADJ058)	□	CA71C B16C507J35F1V87 E18V3R3X10
(ADJ062)	◇	CA71C B16C507J35F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2229	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

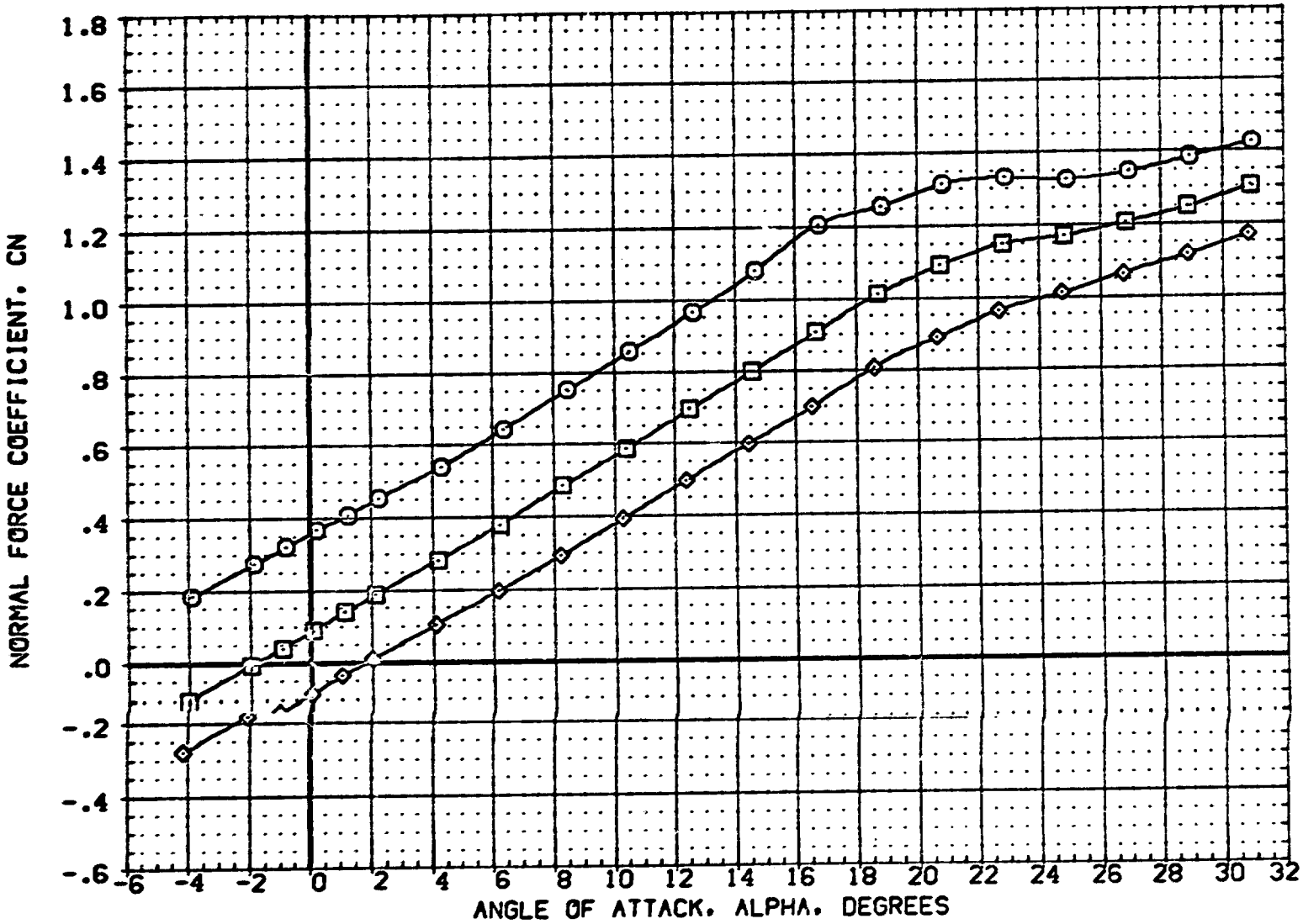


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU061)	○	CA71C B16CSD7J35F1V87 E18V3R3X10	15.000	.530	7.000	5.000
(ADU058)	□	CA71C B16CSD7J35F1V87 E16V3R3X10	.000	.530	7.000	5.000
(ADU062)	◇	CA71C B16CSD7J35F1V87 E18V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

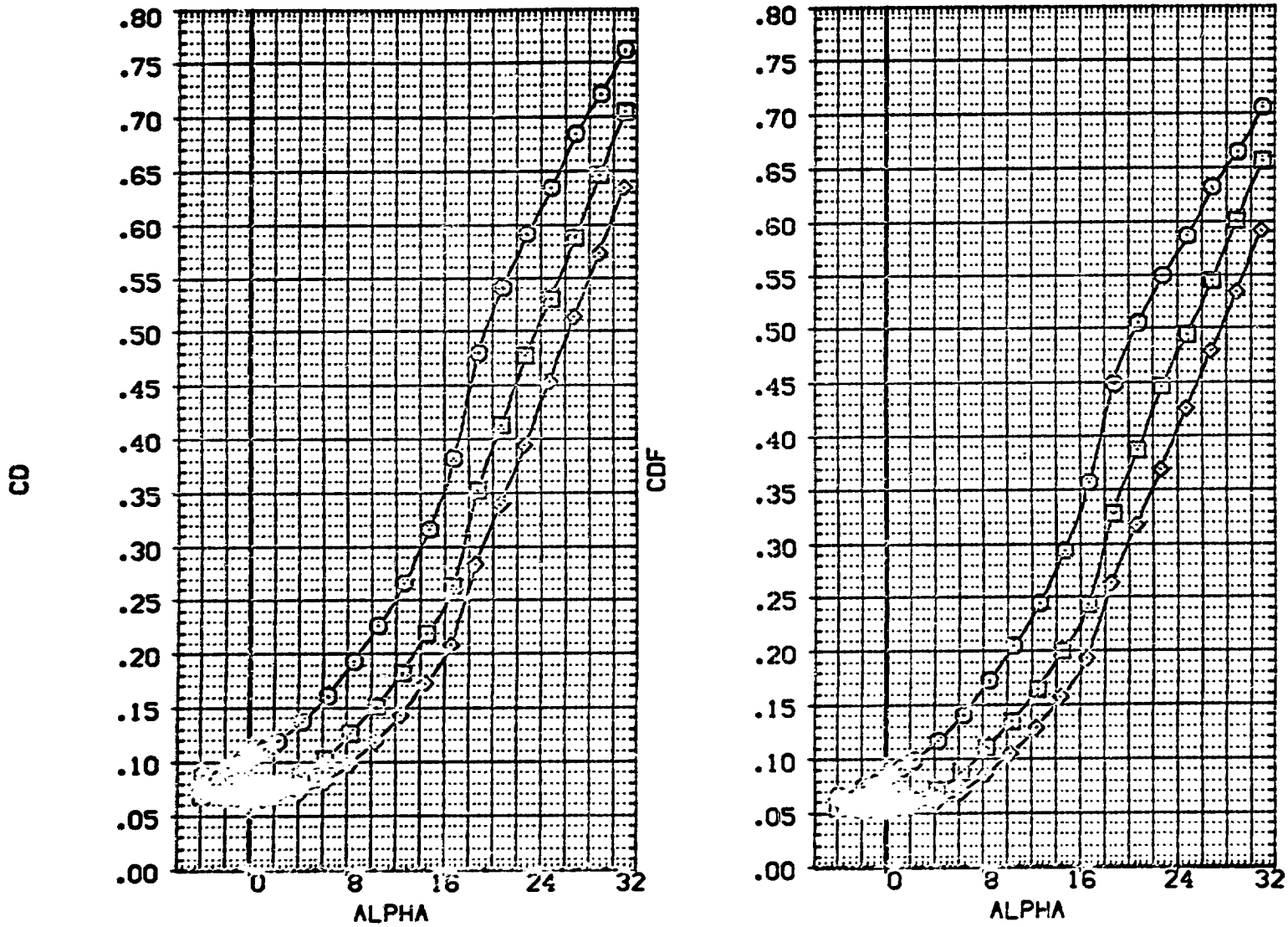


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU061) ○	CA71C B16CSD7J3SF1V87 E16V3R3X10	15.000	.530	7.000	5.000
(ADU058) □	CA71C B16CSD7J3SF1V87 E18V3R3X10	.000	.530	7.000	5.000
(ADU052) ◇	CA71C B16CSD7J3SF1V87 E18V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

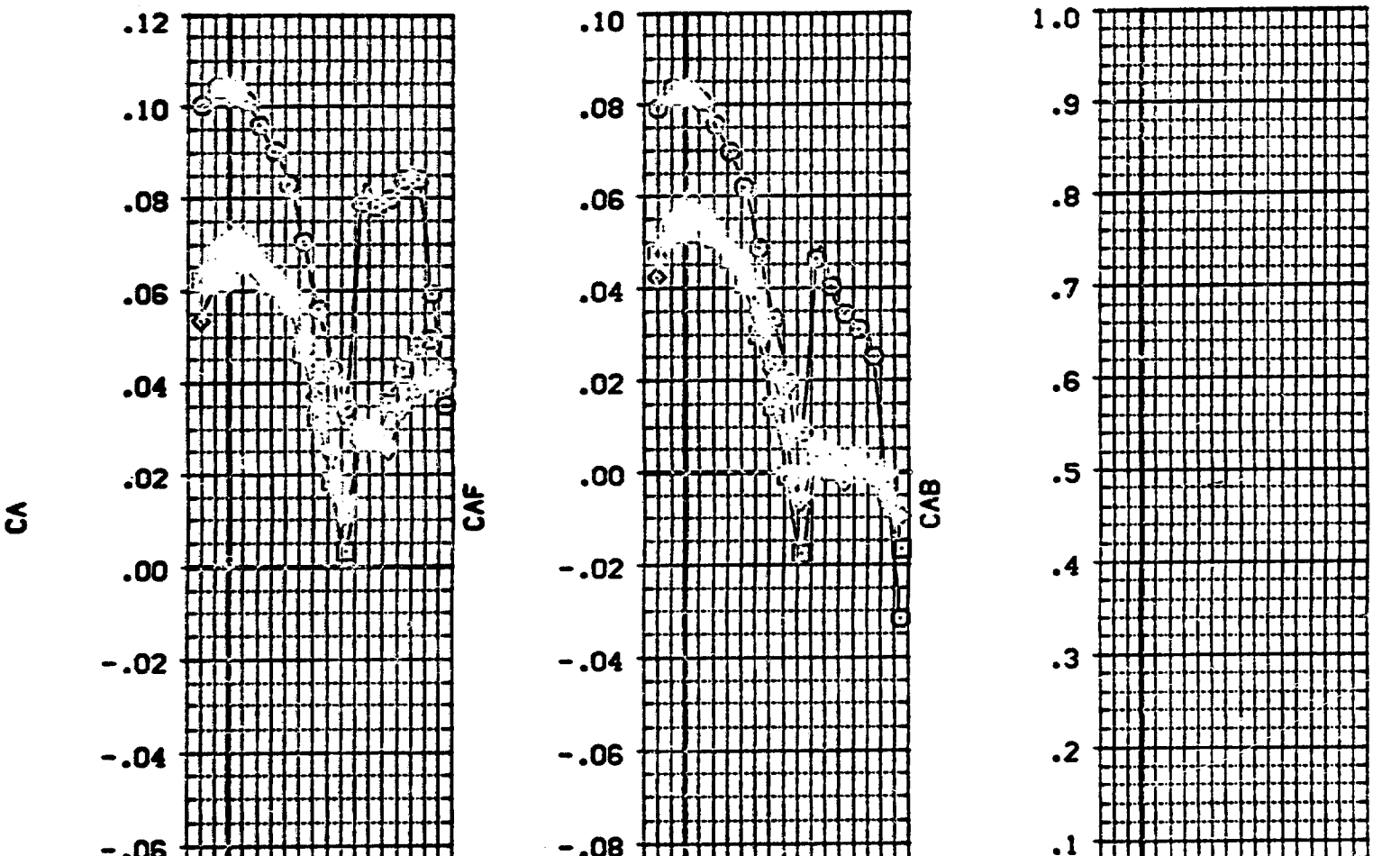


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(ADJ061)	○	CA71C B16C507J35F1V87 E16V3R3X10
(ADJ058)	□	CA71C B16C507J35F1V87 E16V3R3X10
(ADJ062)	◇	CA71C B16C507J35F1V87 E16V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

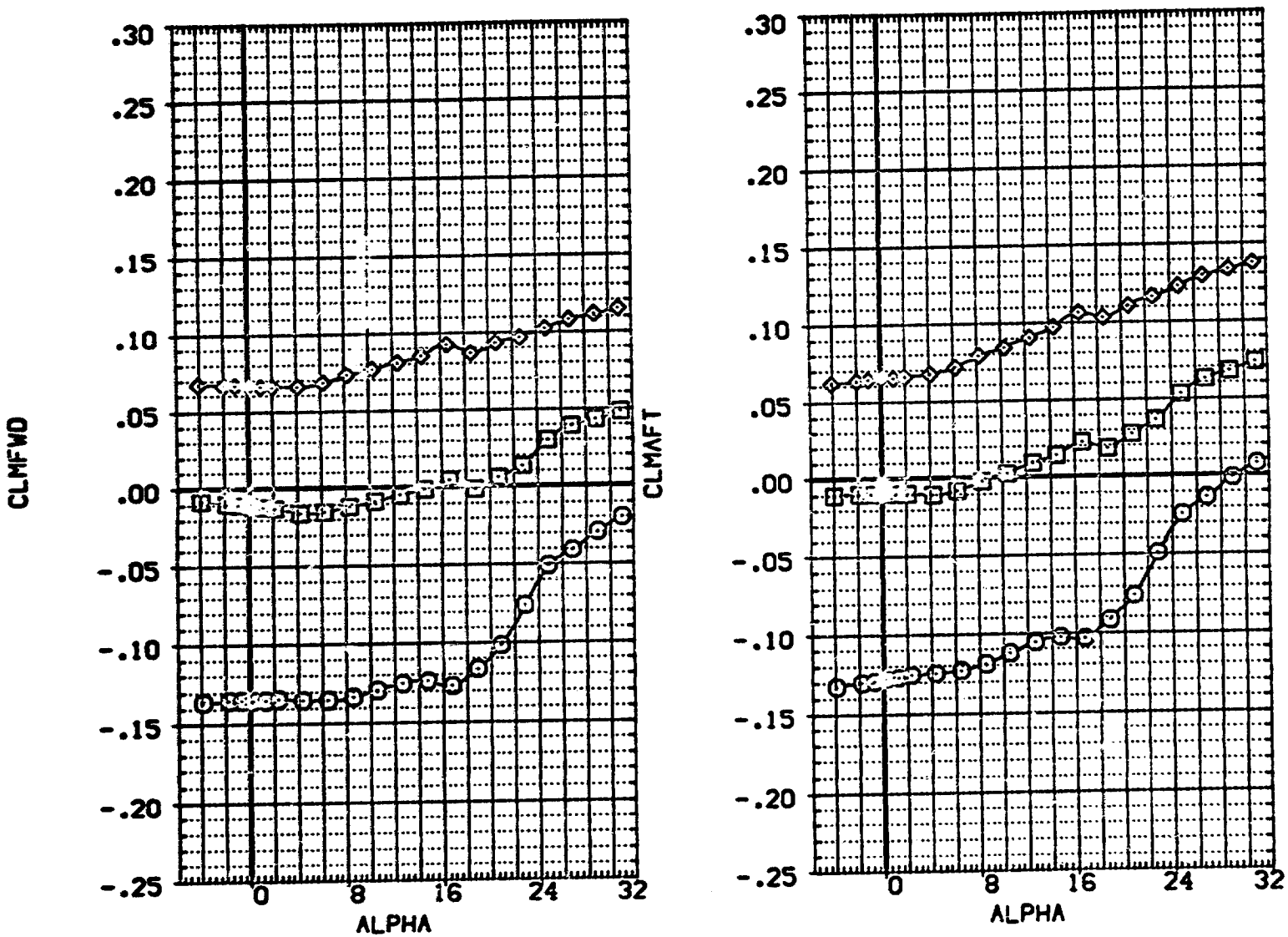


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU051)	○	0A71C B16C5D7J3SF1V87 E18V3R3X10	15.000	.530	7.000	5.000
(ADU058)	□	0A71C B16C5D7J3SF1V87 E18V3R3X10	.000	.530	7.000	5.000
(ADU062)	◇	0A71C B16C5D7J3SF1V87 E18V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

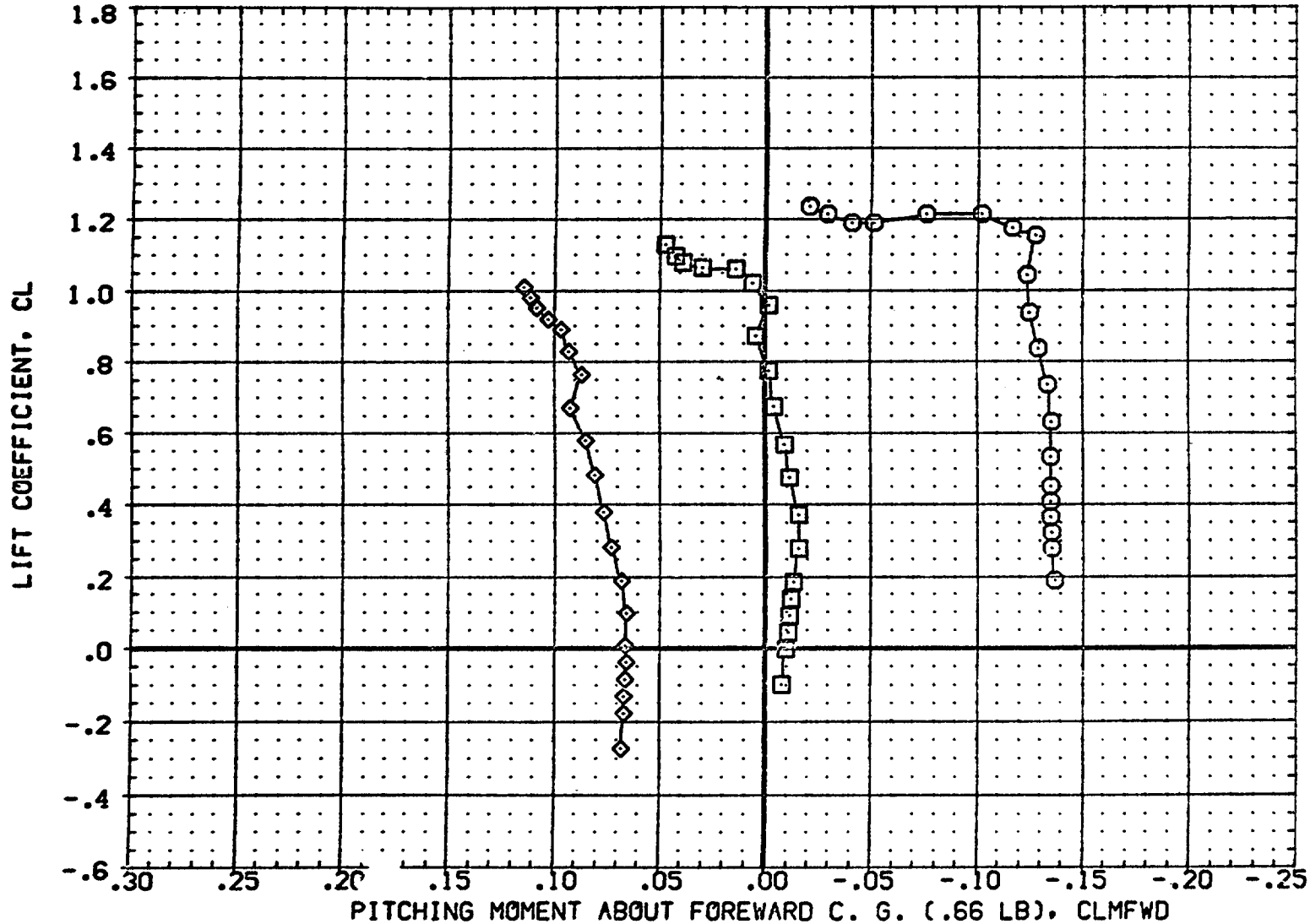


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ADU061)	○	CA71C B16C507J35F1V87 E18V3R3X10
(ADU059)	□	CA71C B16C507J35F1V87 E18V3R3X10
(ADU062)	◇	CA71C B16C507J35F1V87 E18V3R3X1C

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.530	7.000	5.000
.000	.530	7.000	5.000
-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

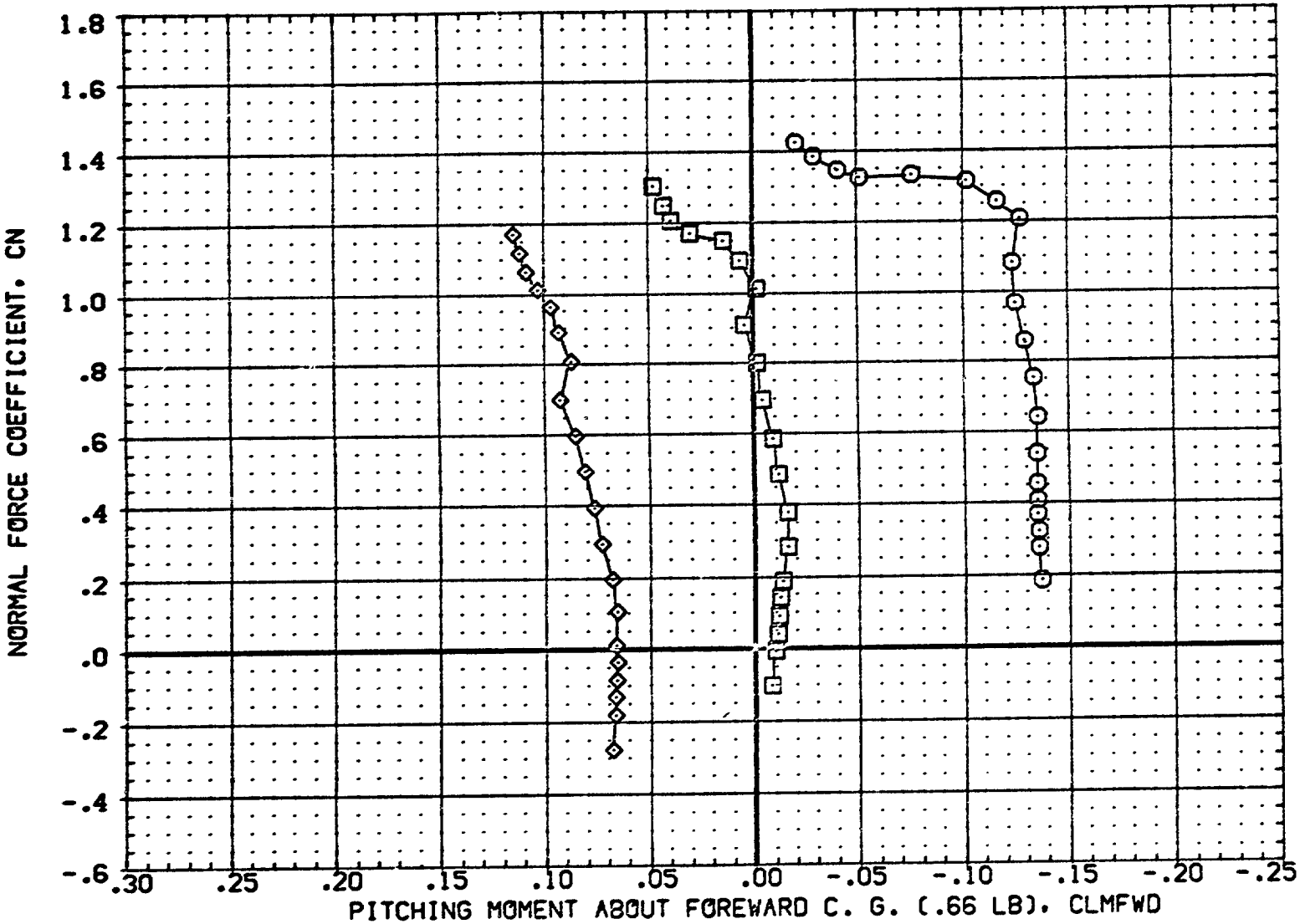


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACXL	NACLIP	NACBTA
(ADUO61) ○	OA71C B16CSD7J3SF1V87 E18V3R3X10	15.000	.530	7.000	5.000
(ADUO59) □	OA71C B16CSD7J3SF1V87 E18V3R3X10	.000	.530	7.000	5.000
(ADUO62) ◇	OA71C B16CSD7J3SF1V87 E18V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

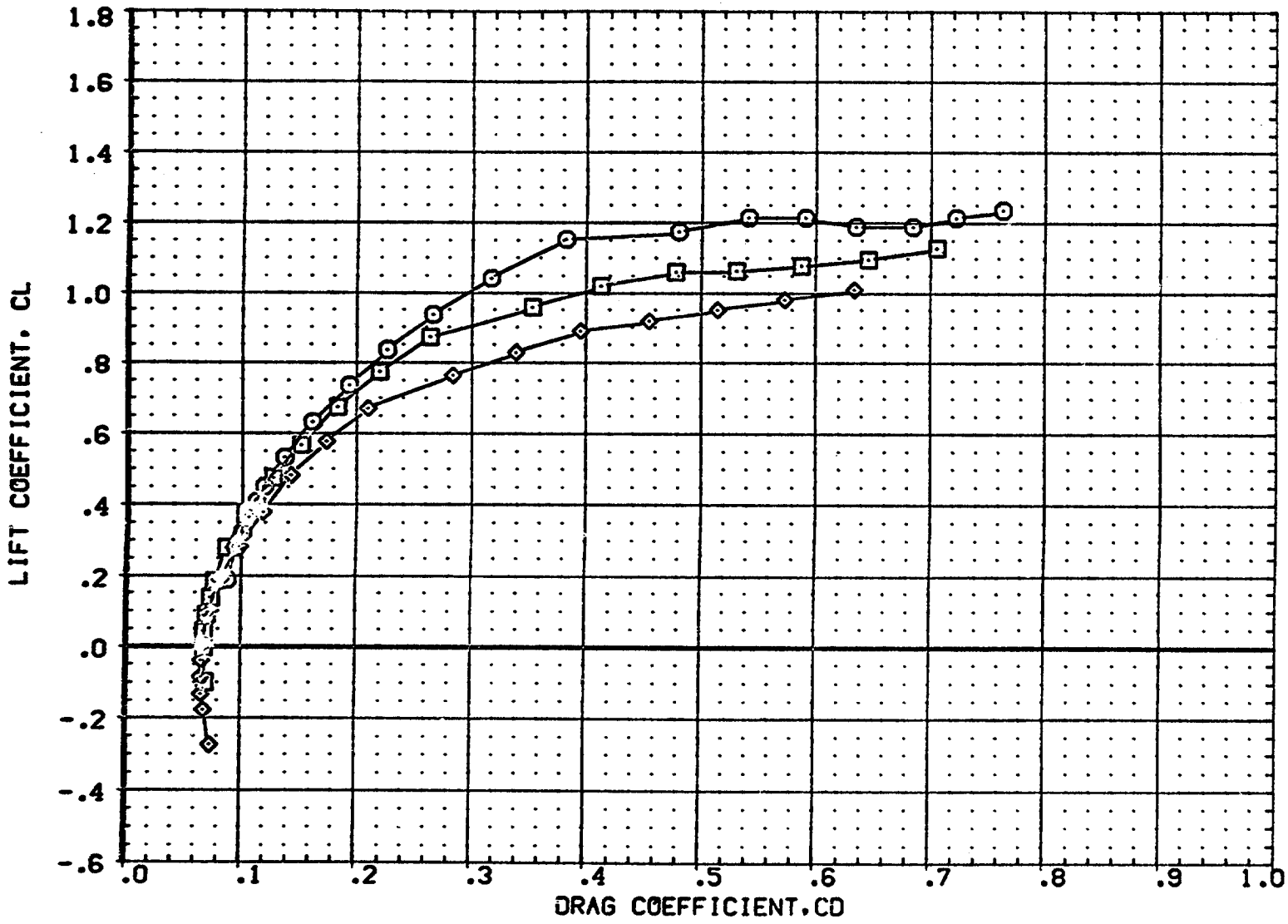


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060.

(A)MACH = .20

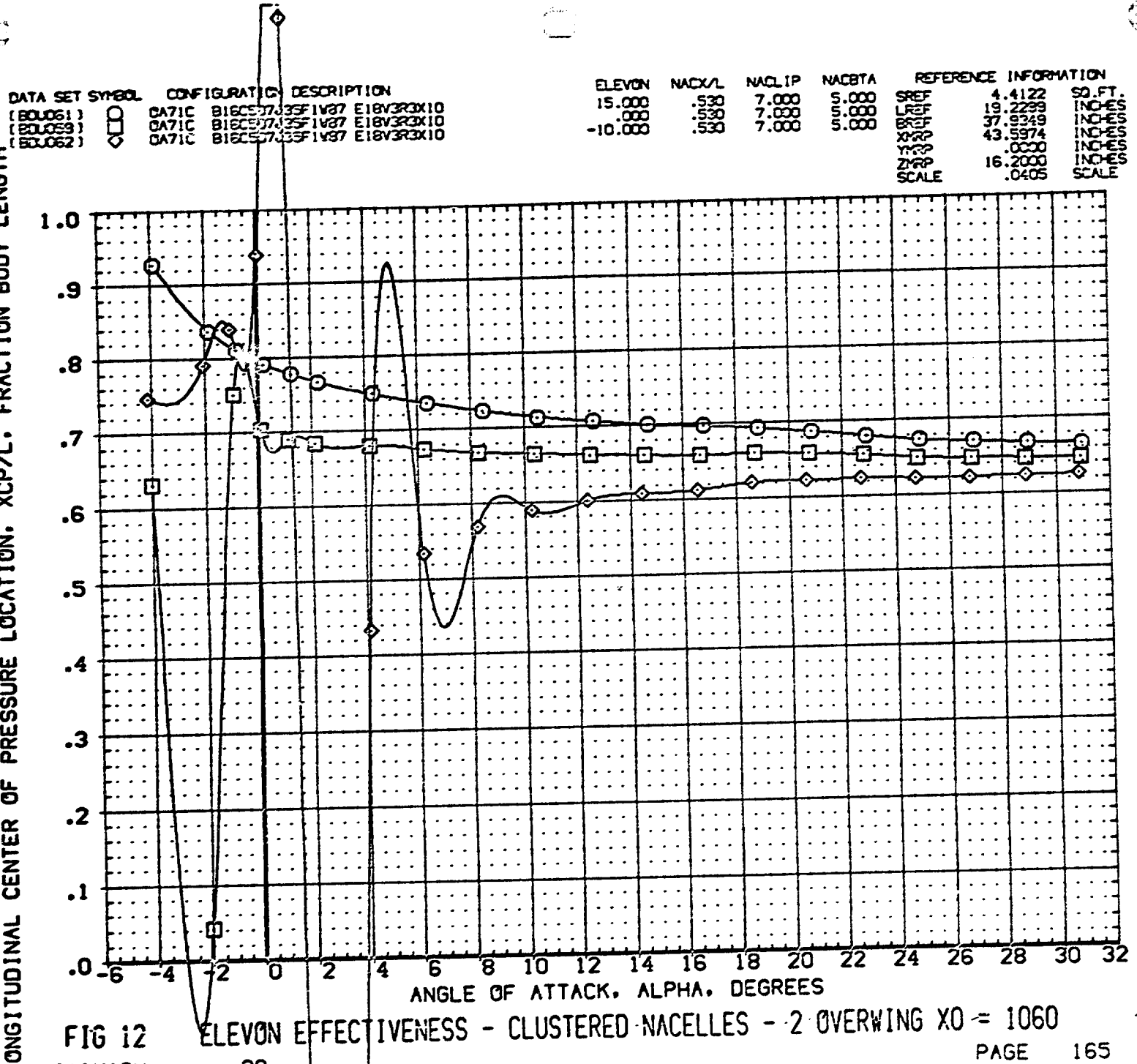


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(BDU061)	○	CA71C B16C5D7J35F1V87 E18V3R3X10	15.000	.530	7.000	5.000
(BDU059)	□	CA71C B16C5D7J35F1V87 E18V3R3X10	.000	.530	7.000	5.000
(BDU062)	◇	CA71C B16C5D7J35F1V87 E18V3R3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

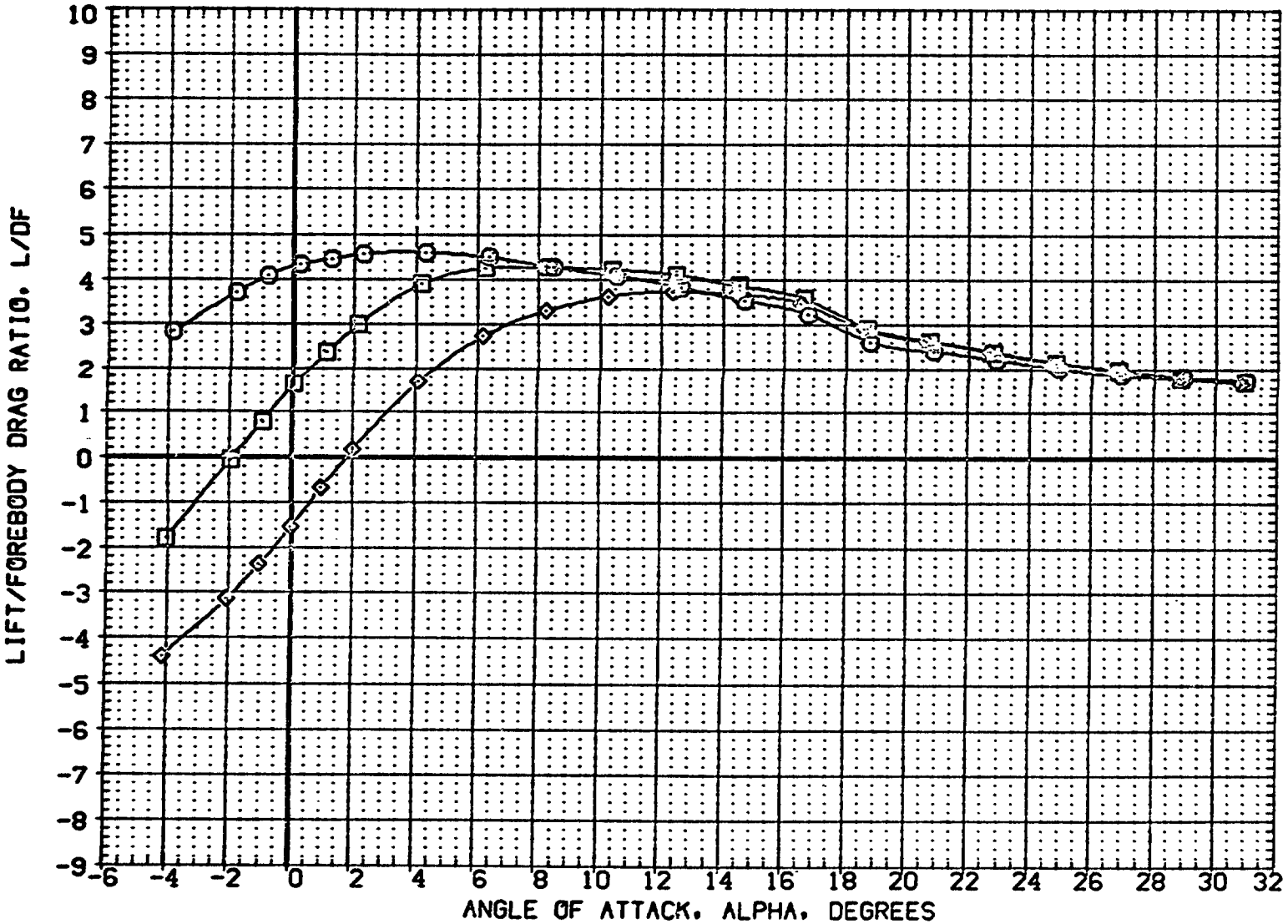


FIG 12 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	DELVON	NACVAL	NACLIP	NACBTA
(ED061)	□	CA71C B16C307E35F1V27 E18V3P3X10	15.000	.530	7.000	5.000
(ED058)	△	CA71C B16C307E35F1V27 E18V3P3X10	.000	.530	7.000	5.000
(ED062)	◇	CA71C B16C307E35F1V27 E18V3P3X10	-10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2229	INCHES
BREF	37.9348	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

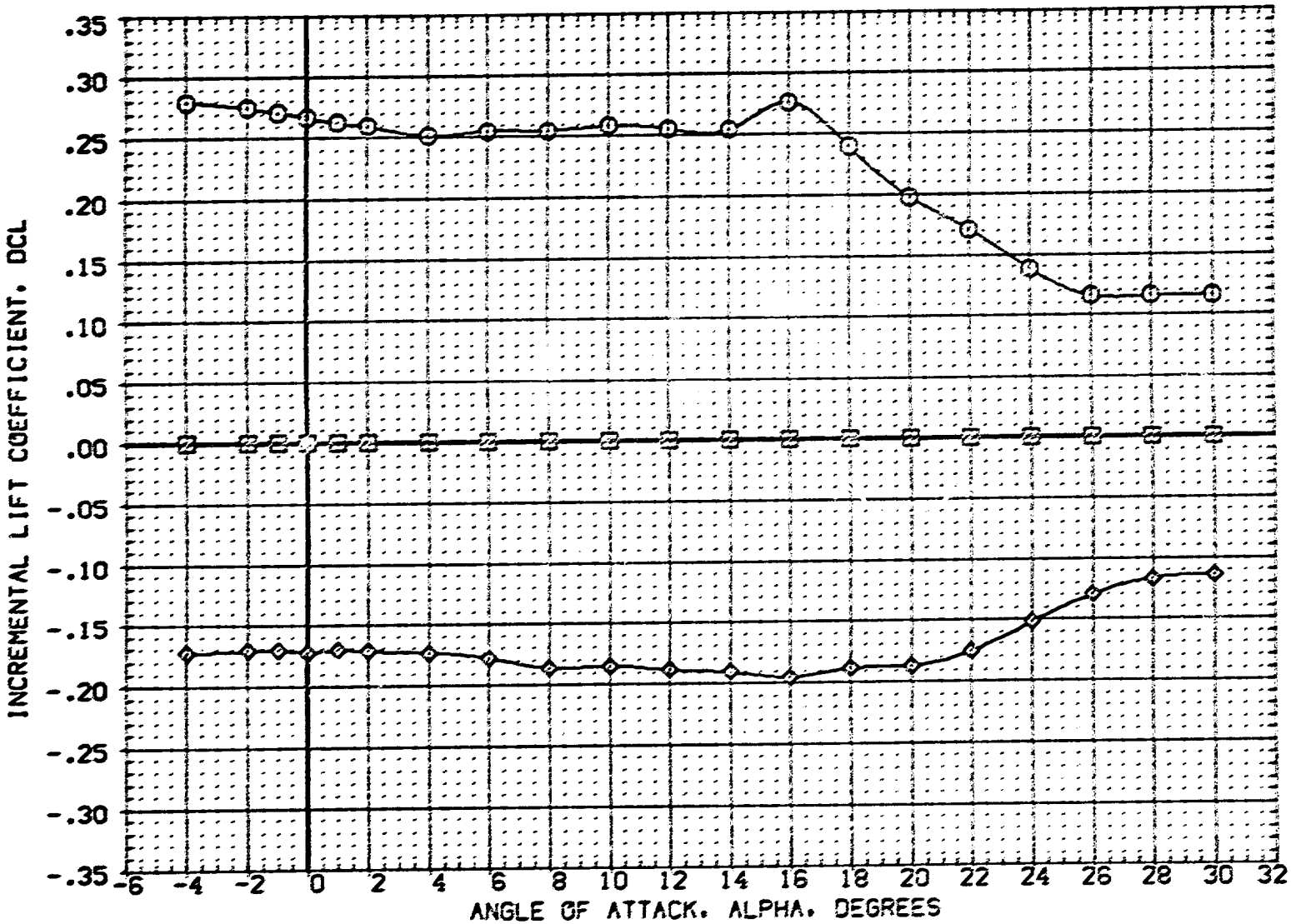


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

(A)MACH = .21

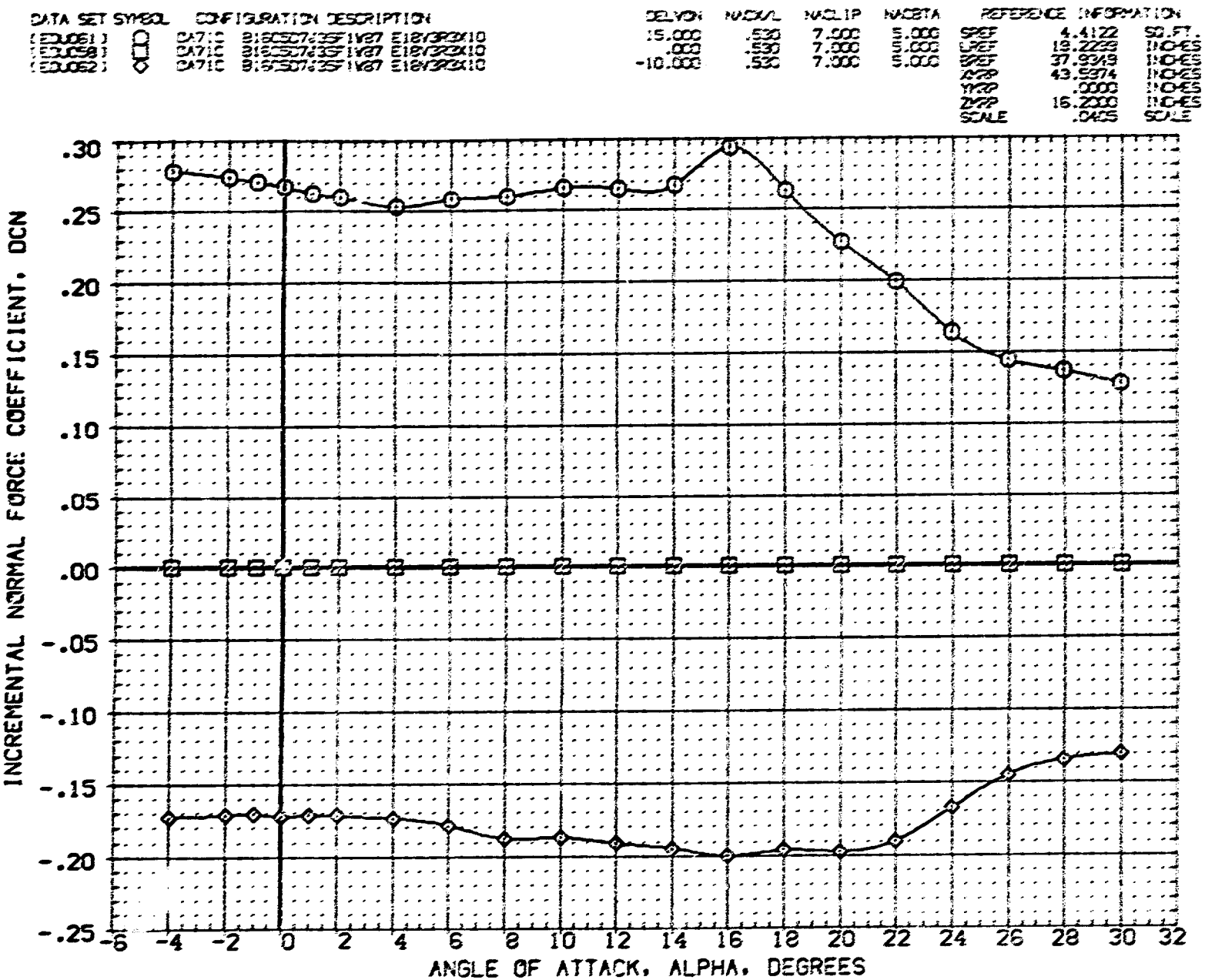


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

(A)MACH = .21

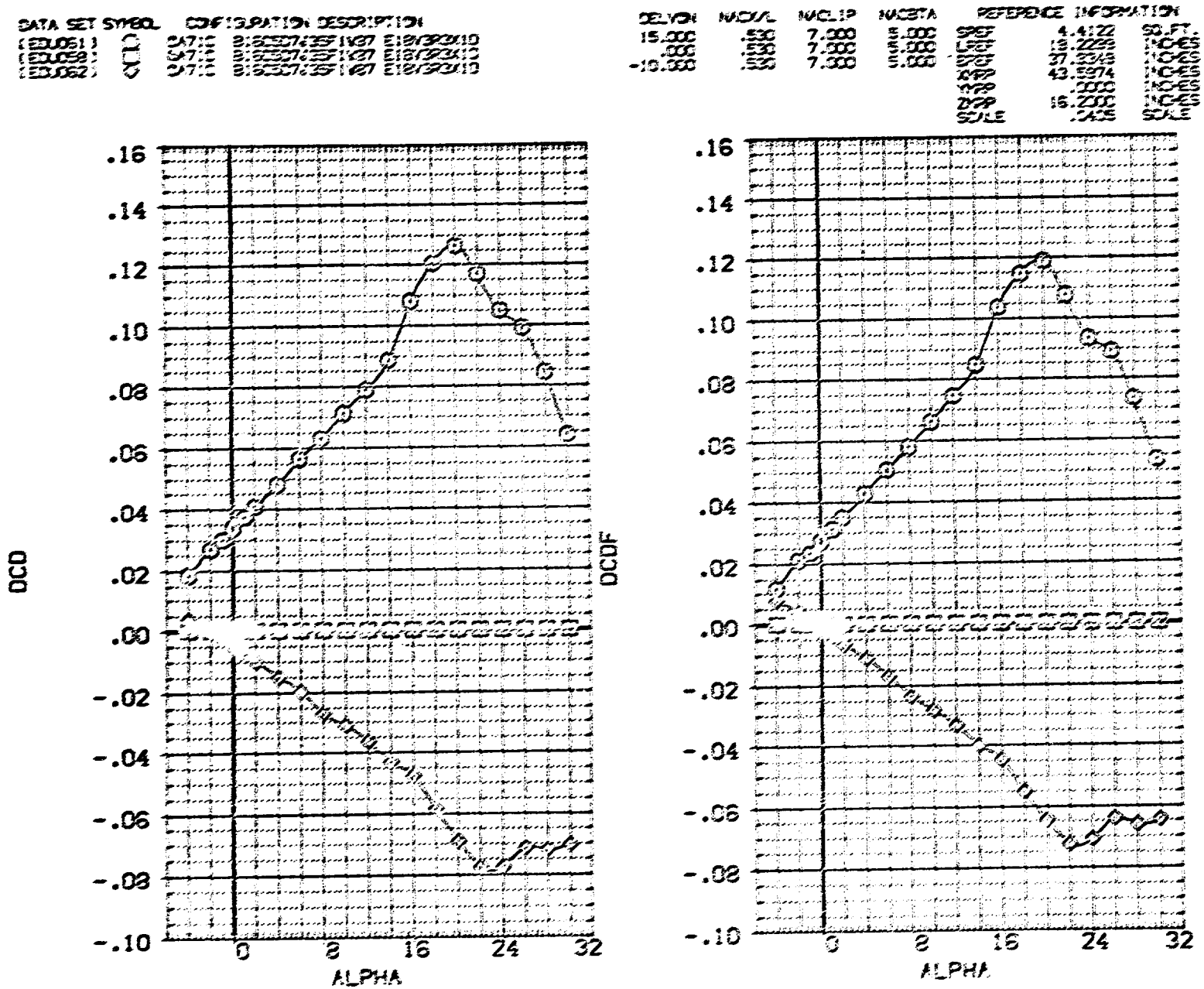


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1080

CADMACH = .2

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(EDU061)	CA71C B16C507423F1V87 E12/23/10
(EDU058)	CA71C B16C507423F1V87 E16V23/10
(EDU062)	CA71C B16C507423F1V87 E12/23/10

DELVON	NACXL	NACLIP	NACETA
15.000	.550	7.000	5.000
.000	.550	7.000	5.000
-10.000	.550	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
XMRP	37.9343	INCHES
XMRP	43.5374	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

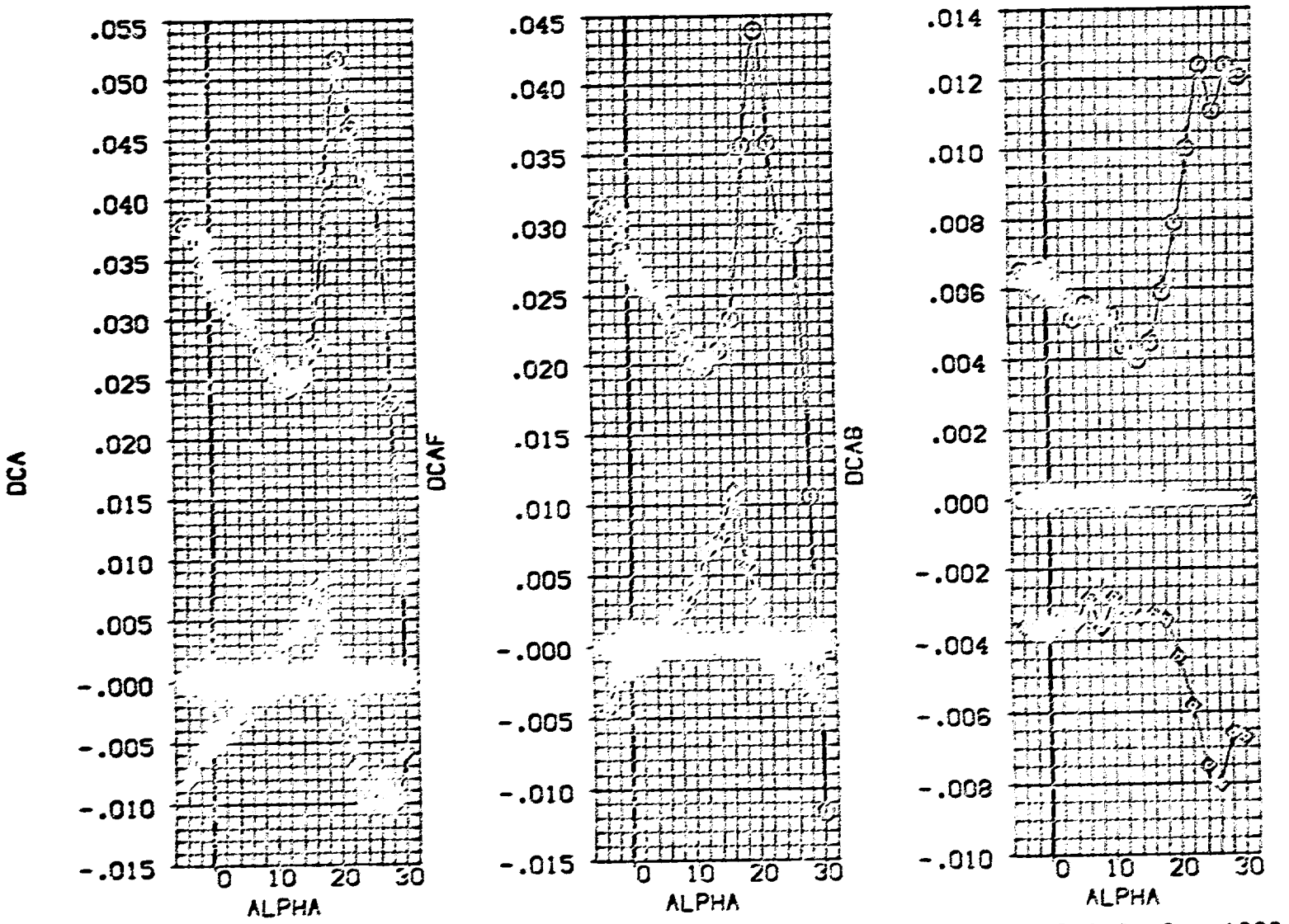


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

(A)MACH = .21

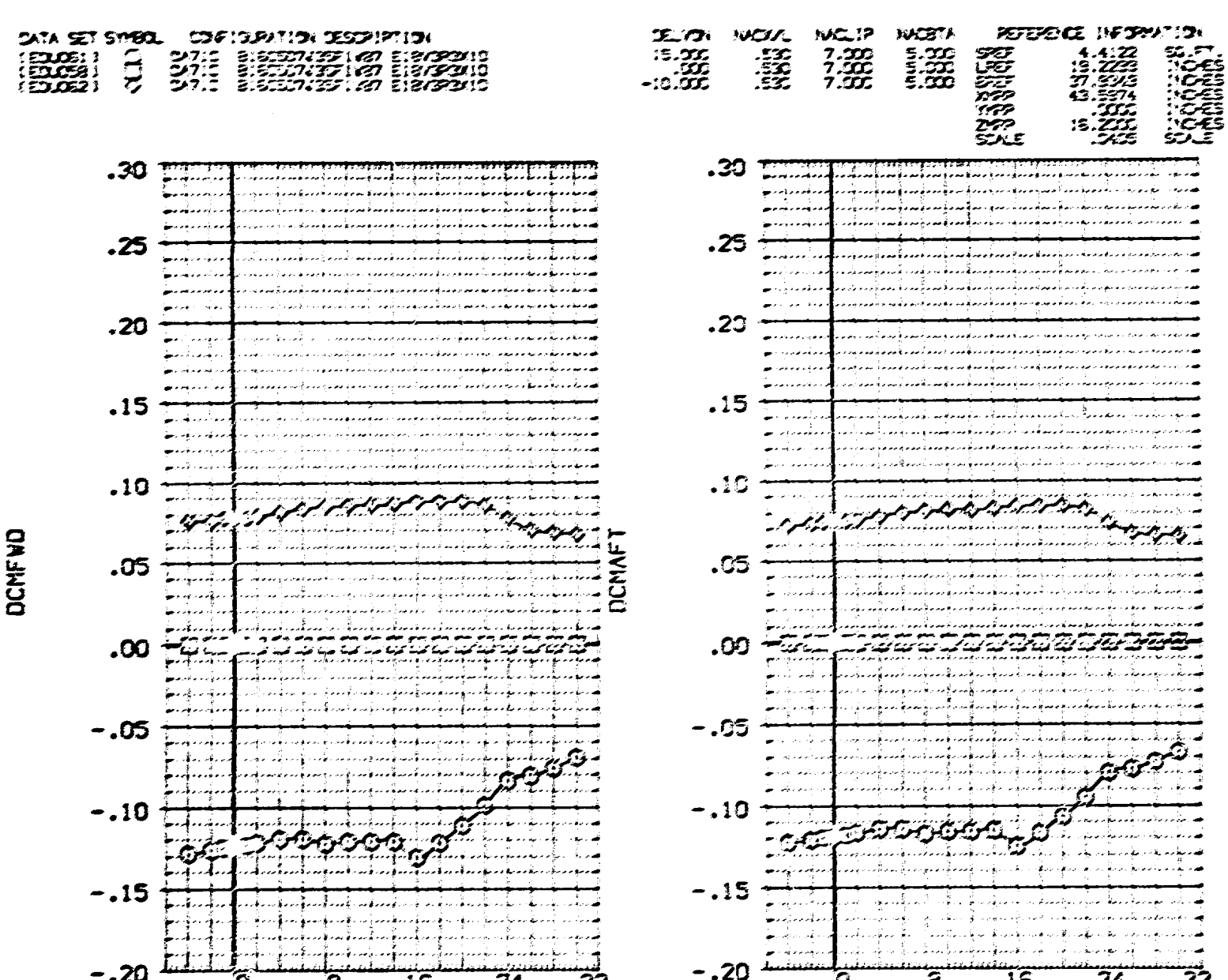


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XD = 1.080

CA)MACH = .21

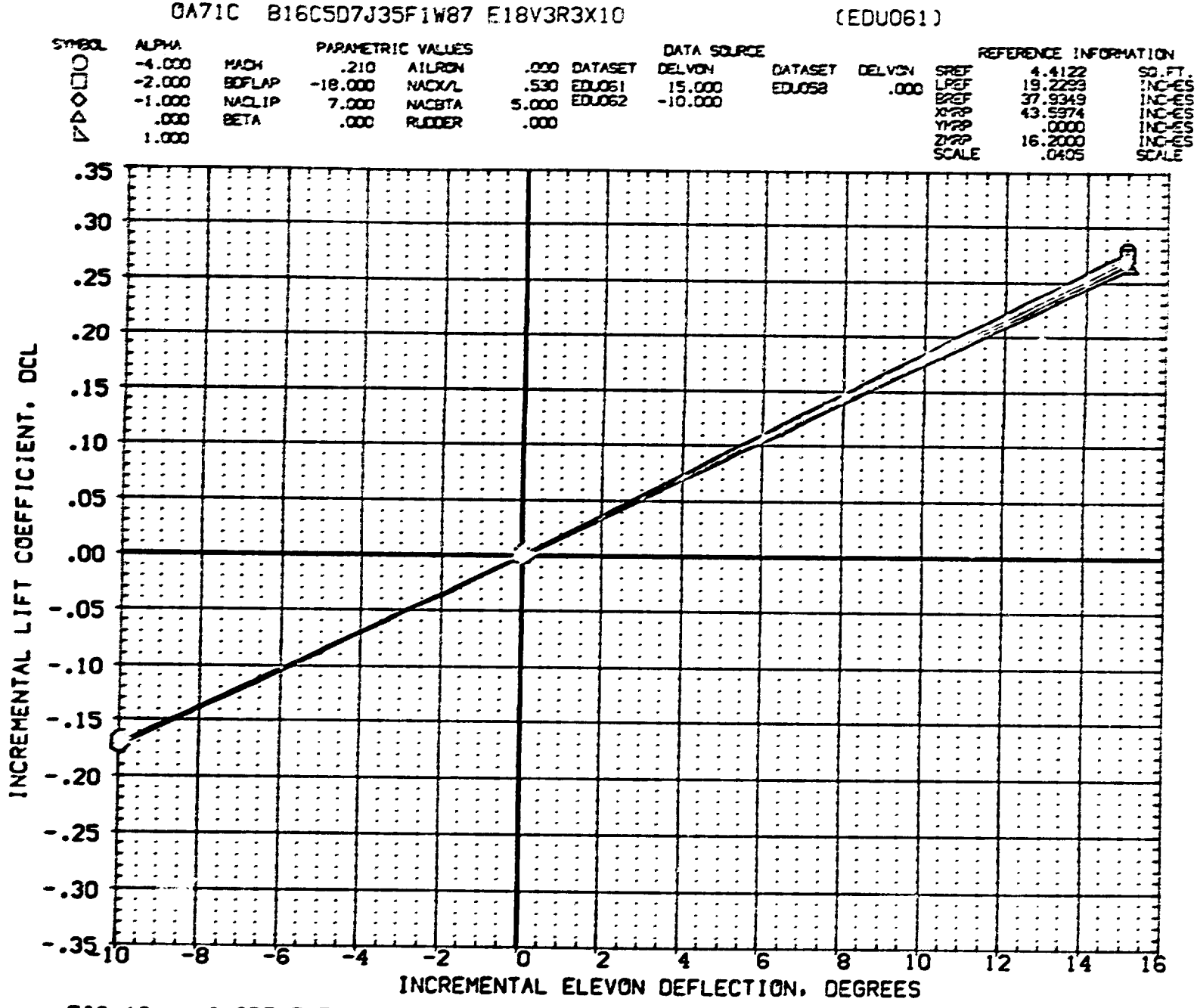


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

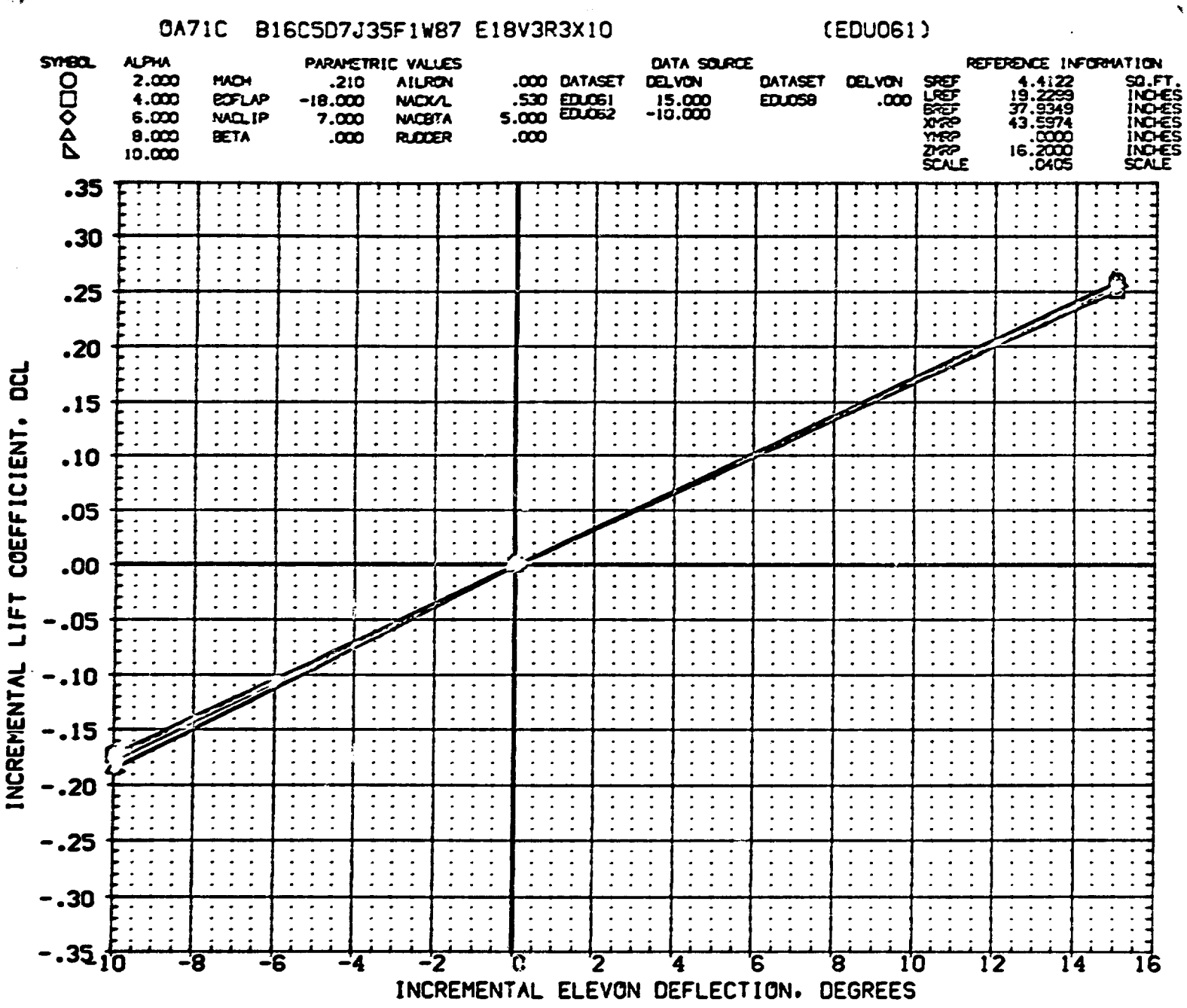


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

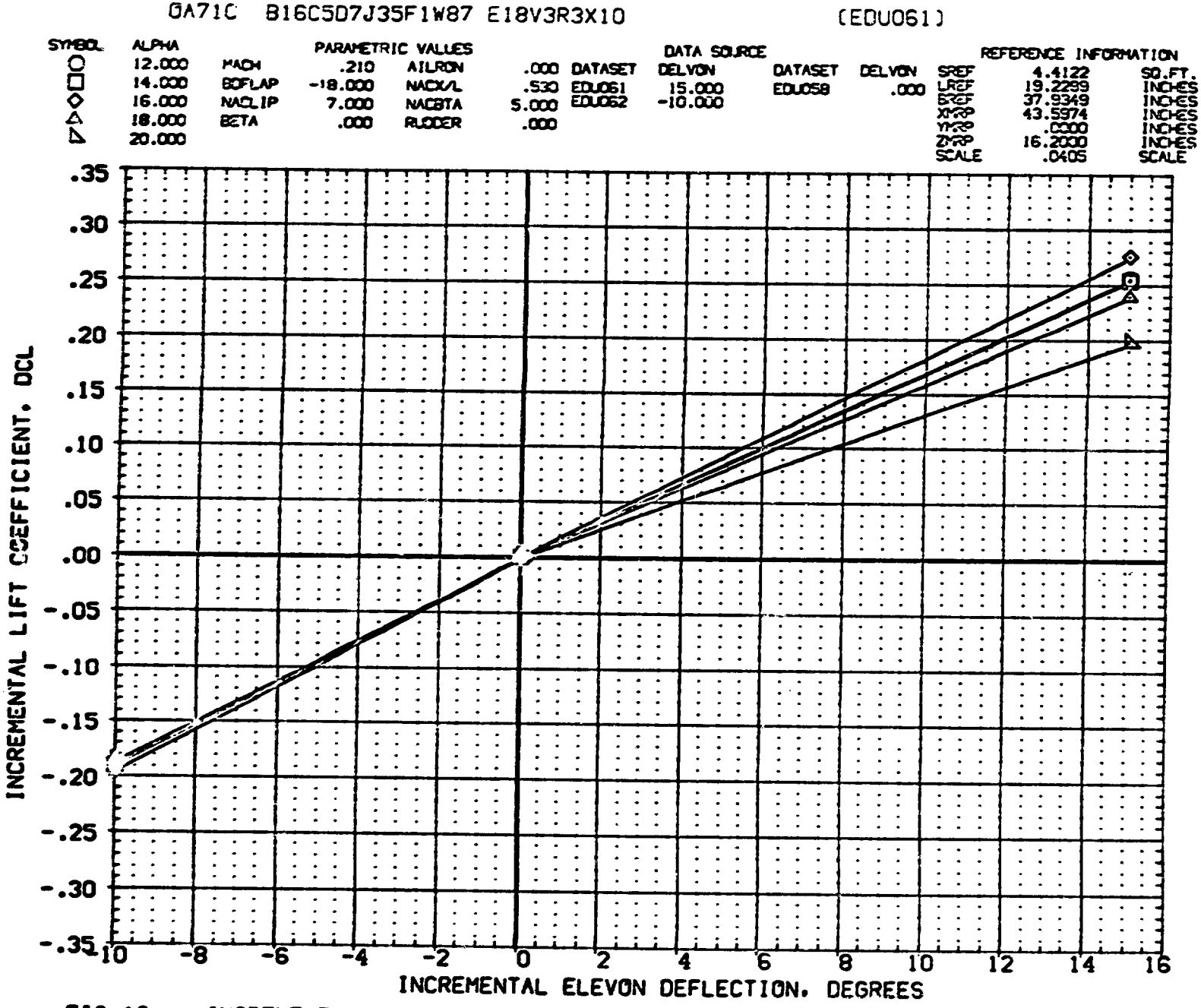


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

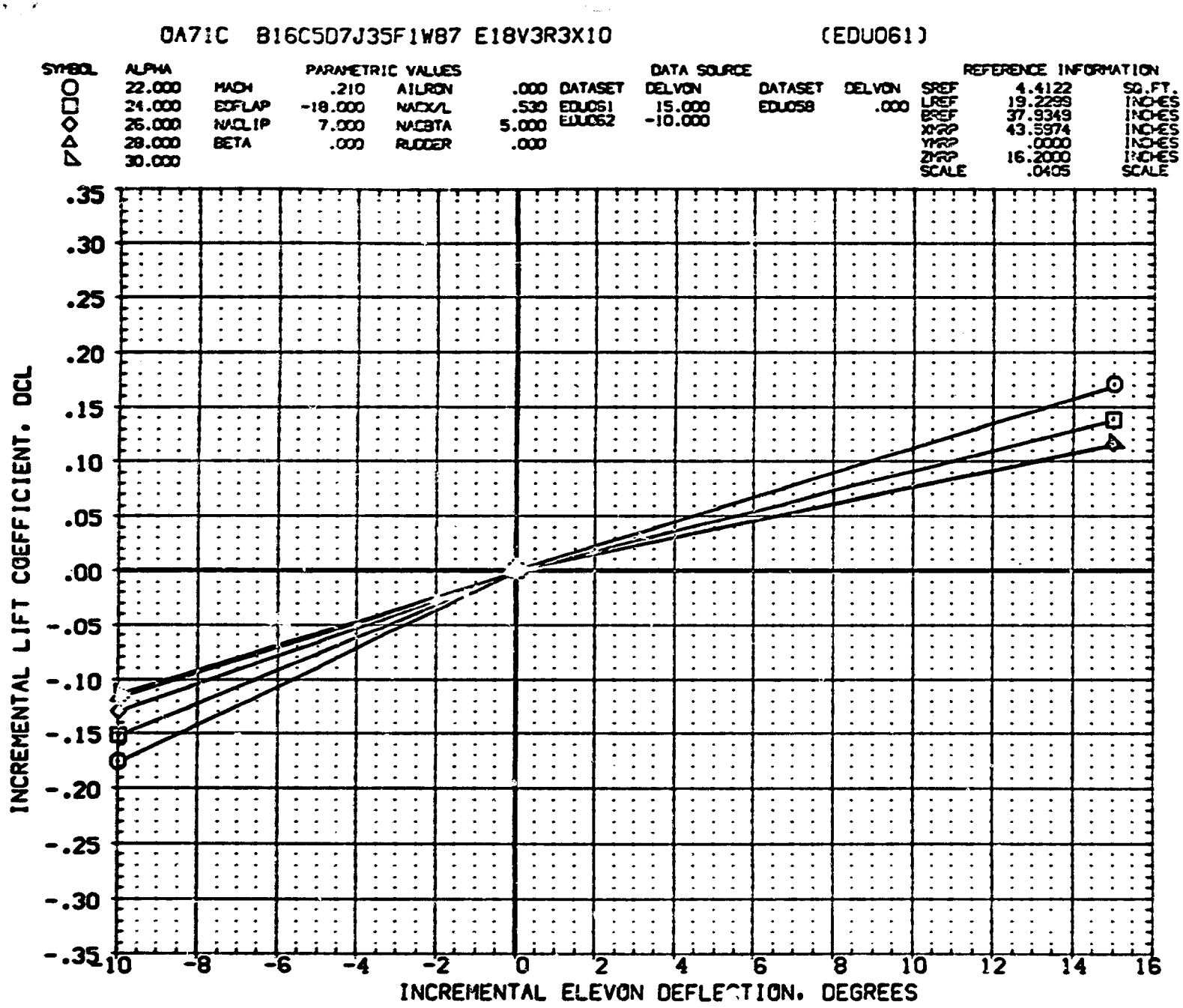


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

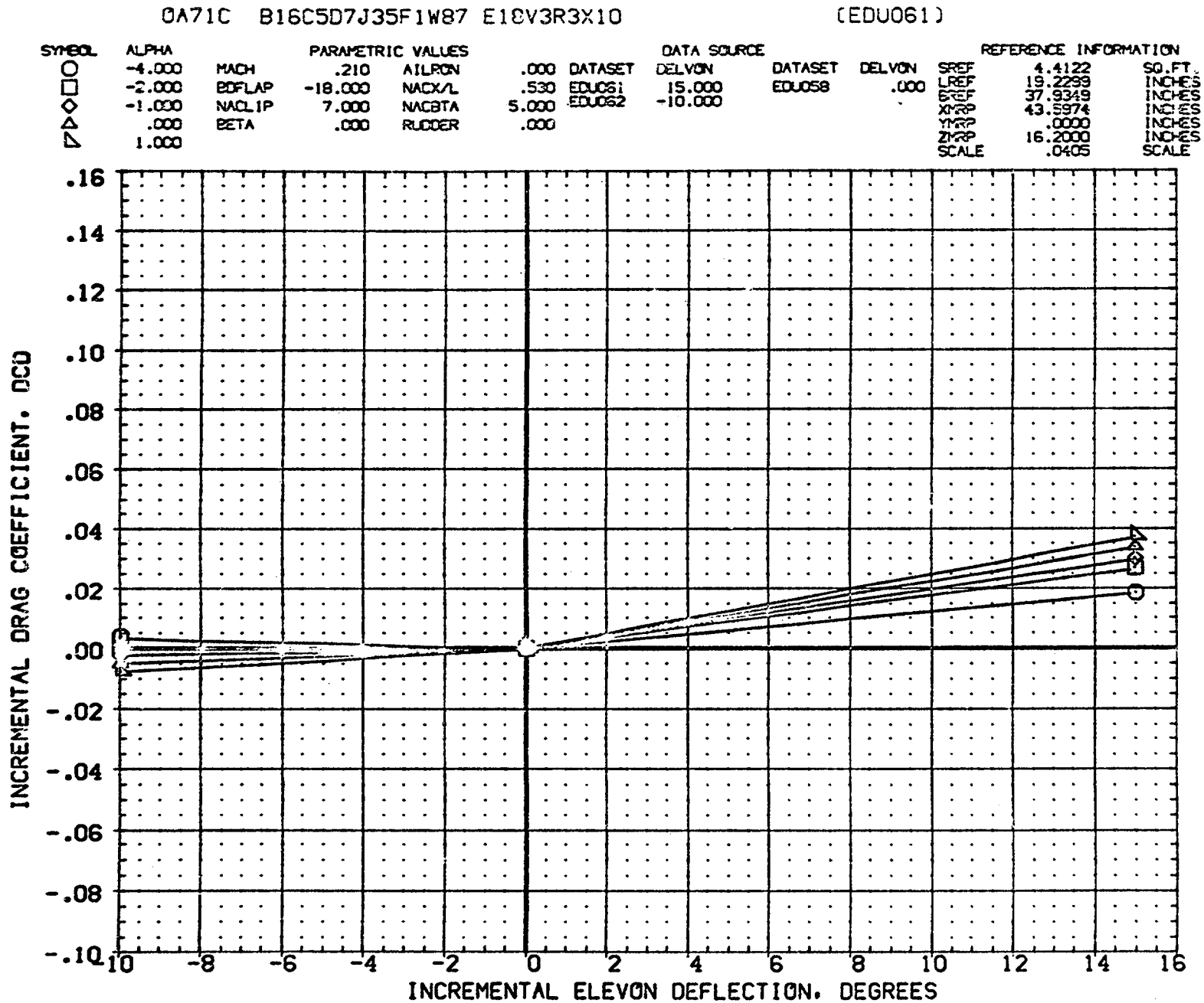


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

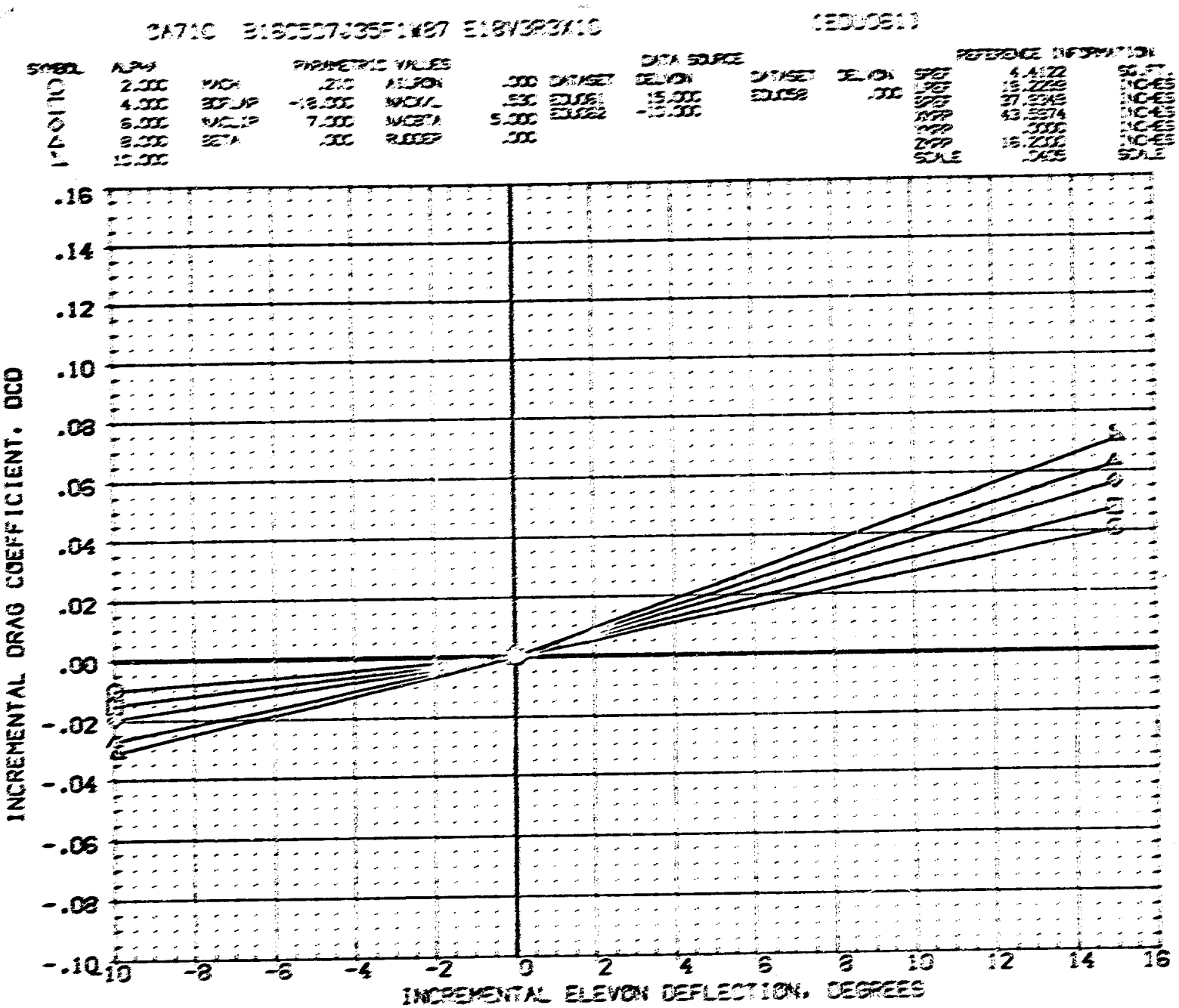


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XG = 1080

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	BOFLAP	-18.000	NACWL	.530	EDU061	15.000	EDU058	.000	LREF	19.2299	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU062	-10.000			BREF	37.9348	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

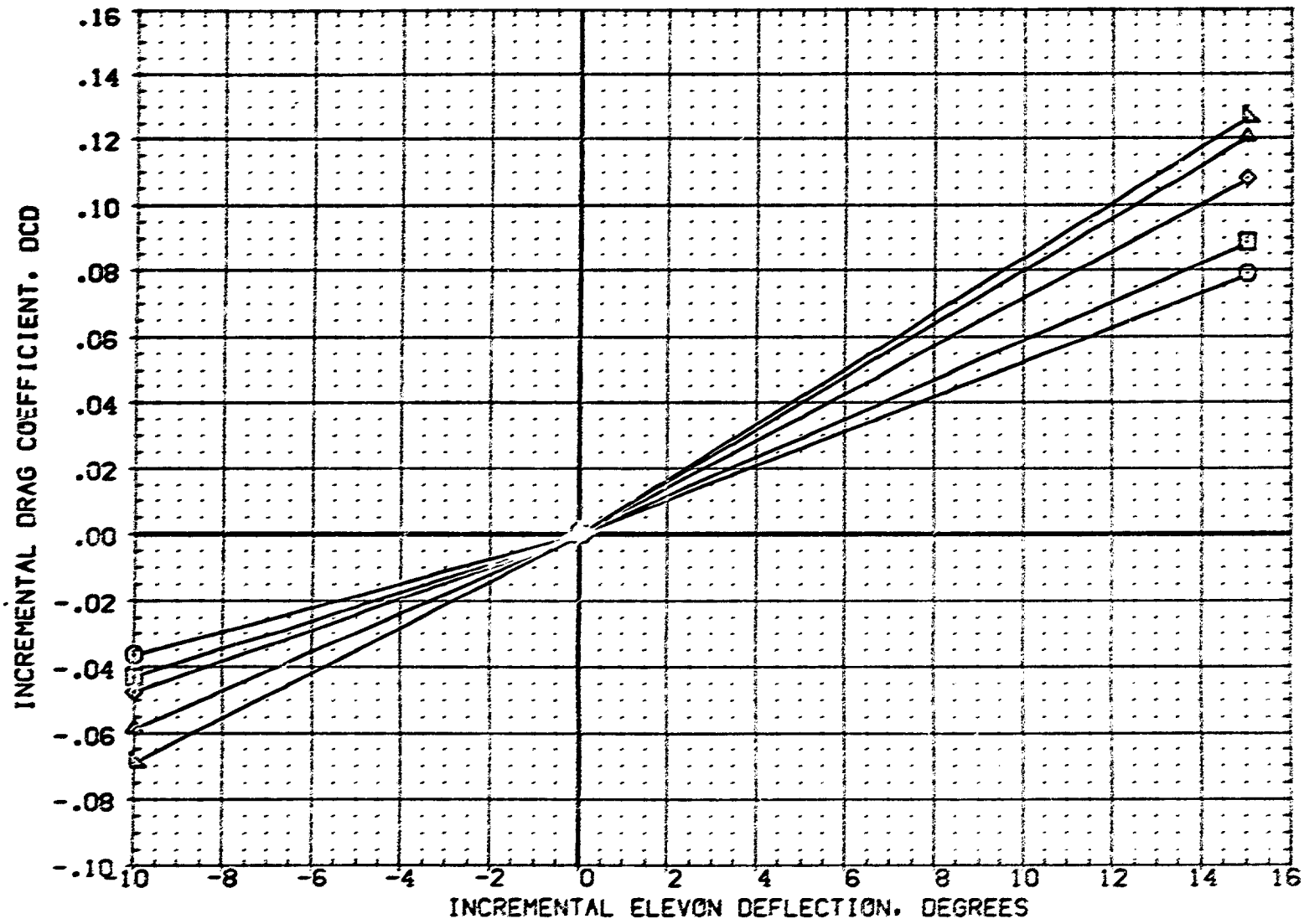


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

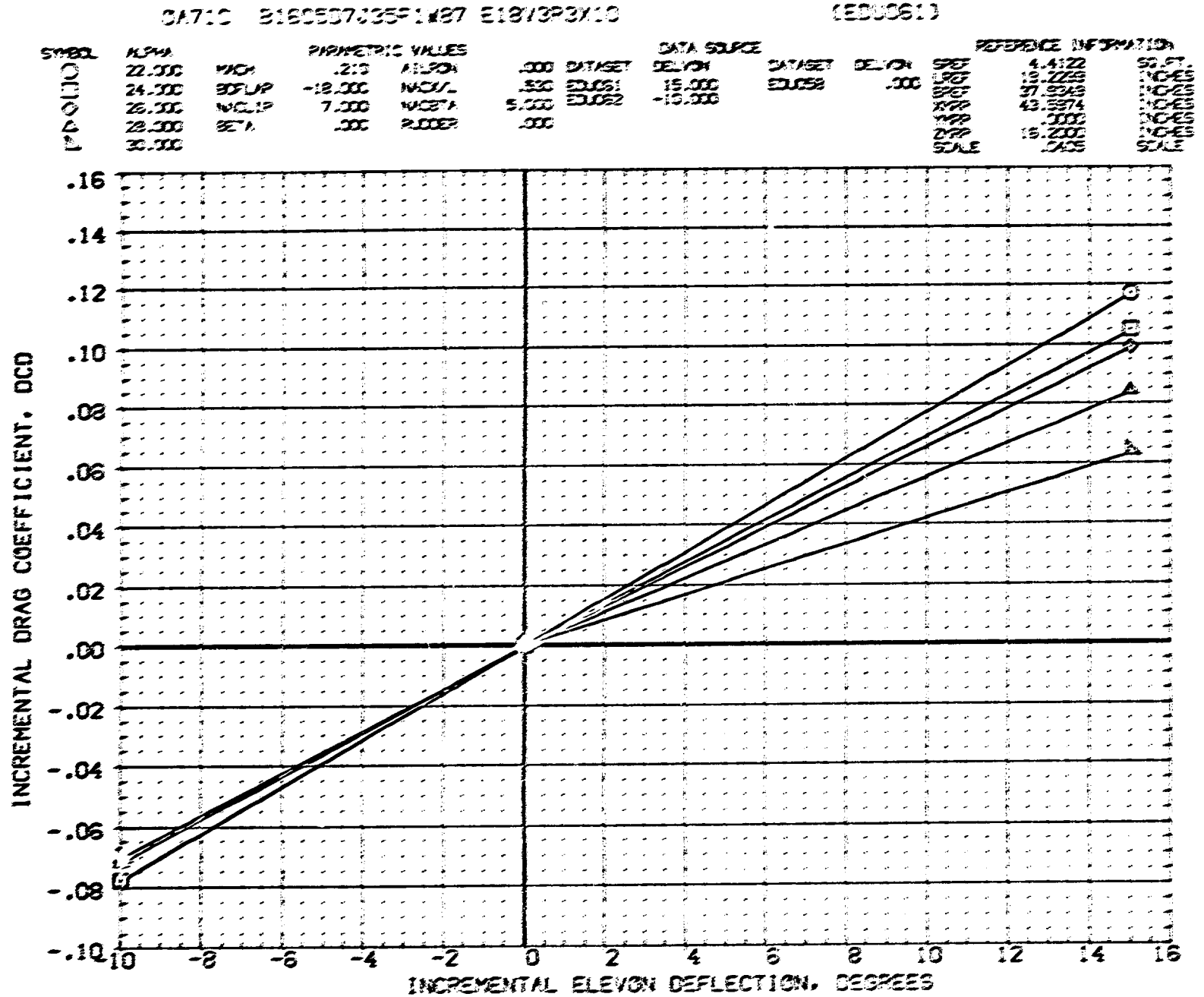


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XG = 1060

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELEVON	DATASET	DELEVON	SREF	4.4122	SQ.FT.
□	-2.000	BOFUP	-18.000	MACWL	.530	EDU591	15.000	EDU658	.000	BREF	19.2228	INCHES
◇	-1.000	MACLIP	7.000	MACBTA	5.000	EDU682	-10.000			CREF	37.8343	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5574	INCHES
▷	1.000									YMRP	.0000	INCHES
										ZMRP	15.2000	INCHES
										SCALE	.0405	SCALE

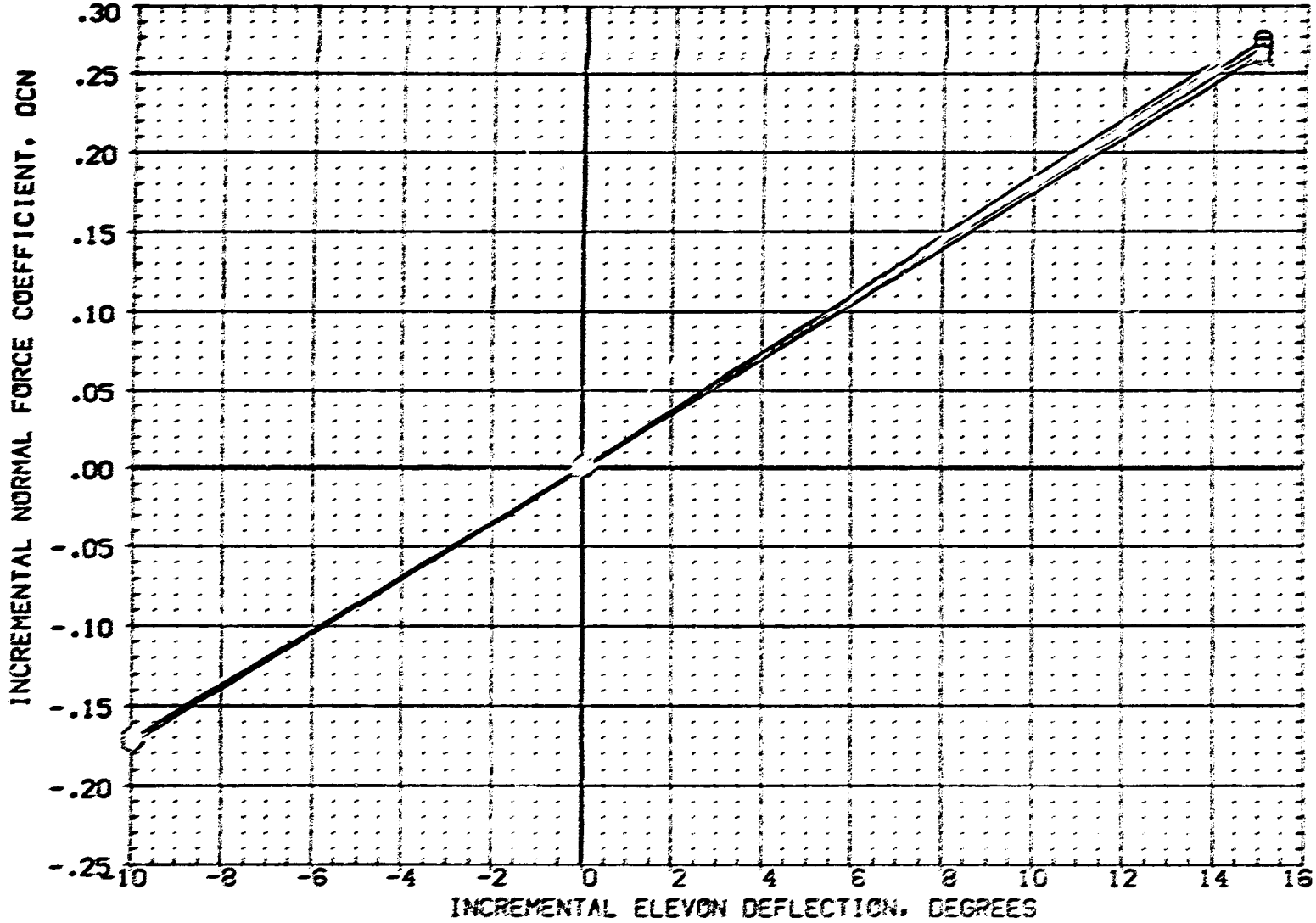


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XD = 1080

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU061)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	2.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	4.000	BOFLAP	-18.000	NACVAL	.530	EDU061	15.000	EDU058	.000	LREF	19.2229	INCHES
◇	6.000	NACLIP	7.000	NACBTA	5.000	EDU062	-10.000			BREF	37.9349	INCHES
△	8.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	10.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0435	SCALE

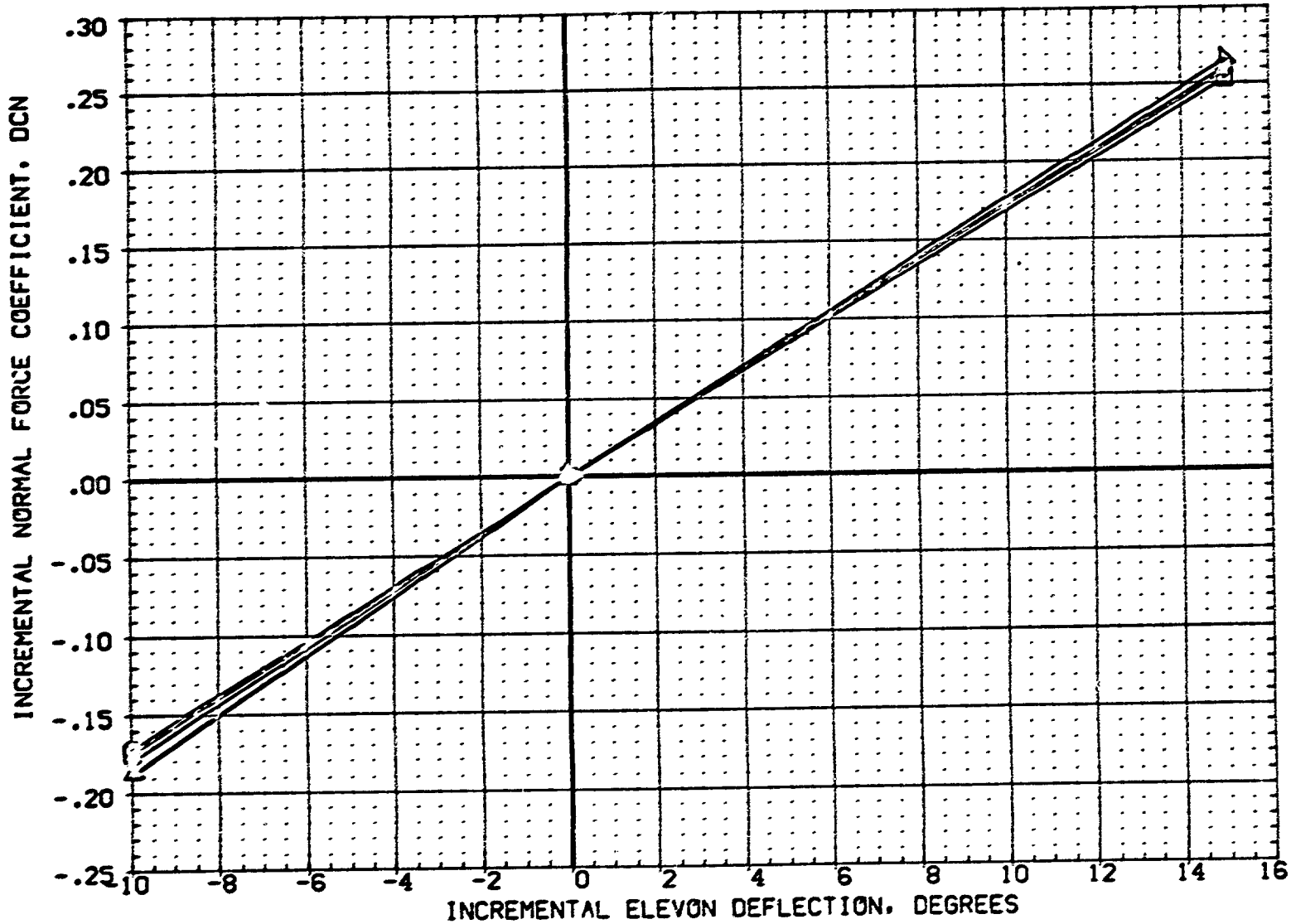


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

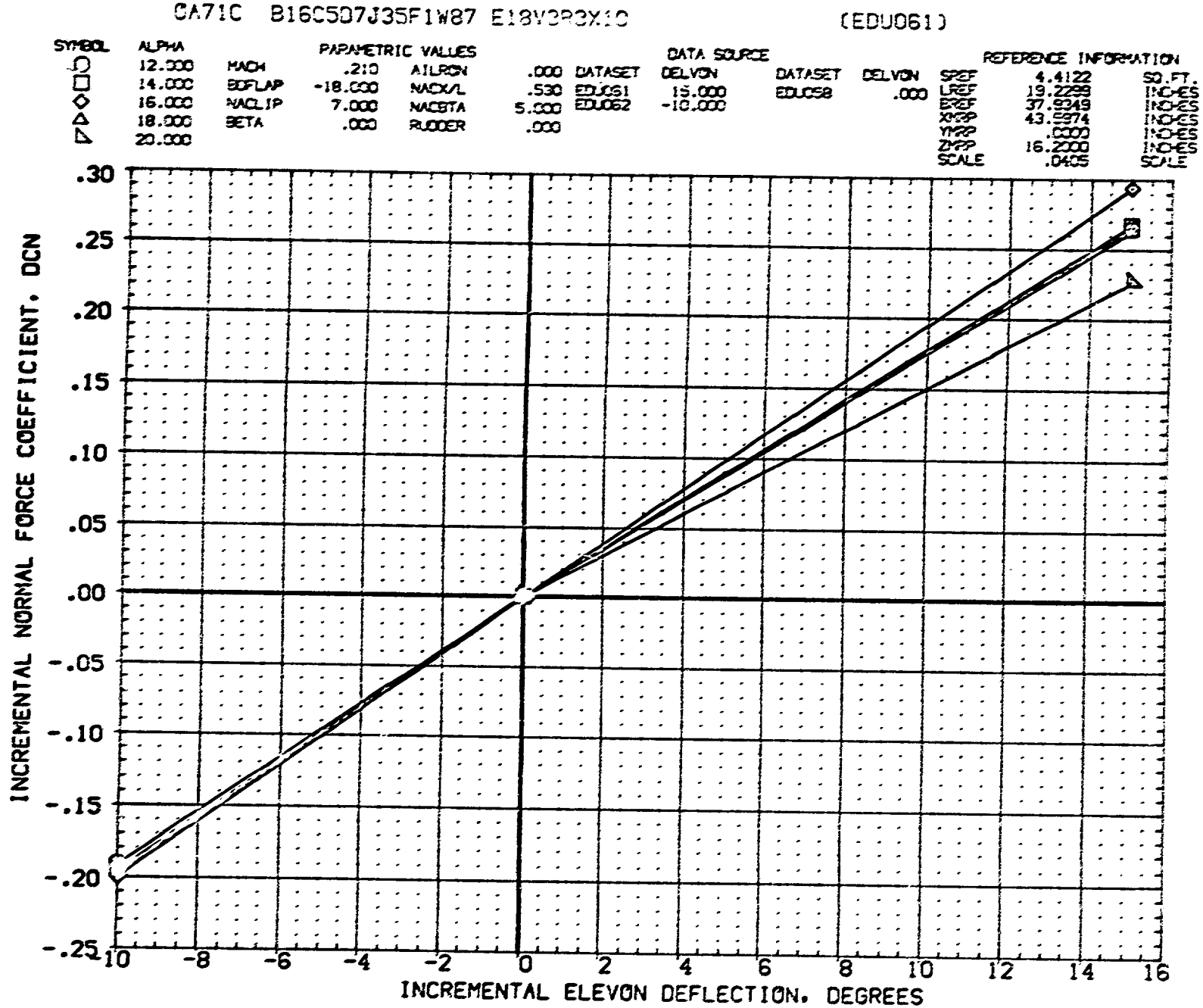


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU061)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	BOFLAP	-18.000	NACX/L	.530	EDU061	15.000	EDU058	.000	LREF	19.2289	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU062	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

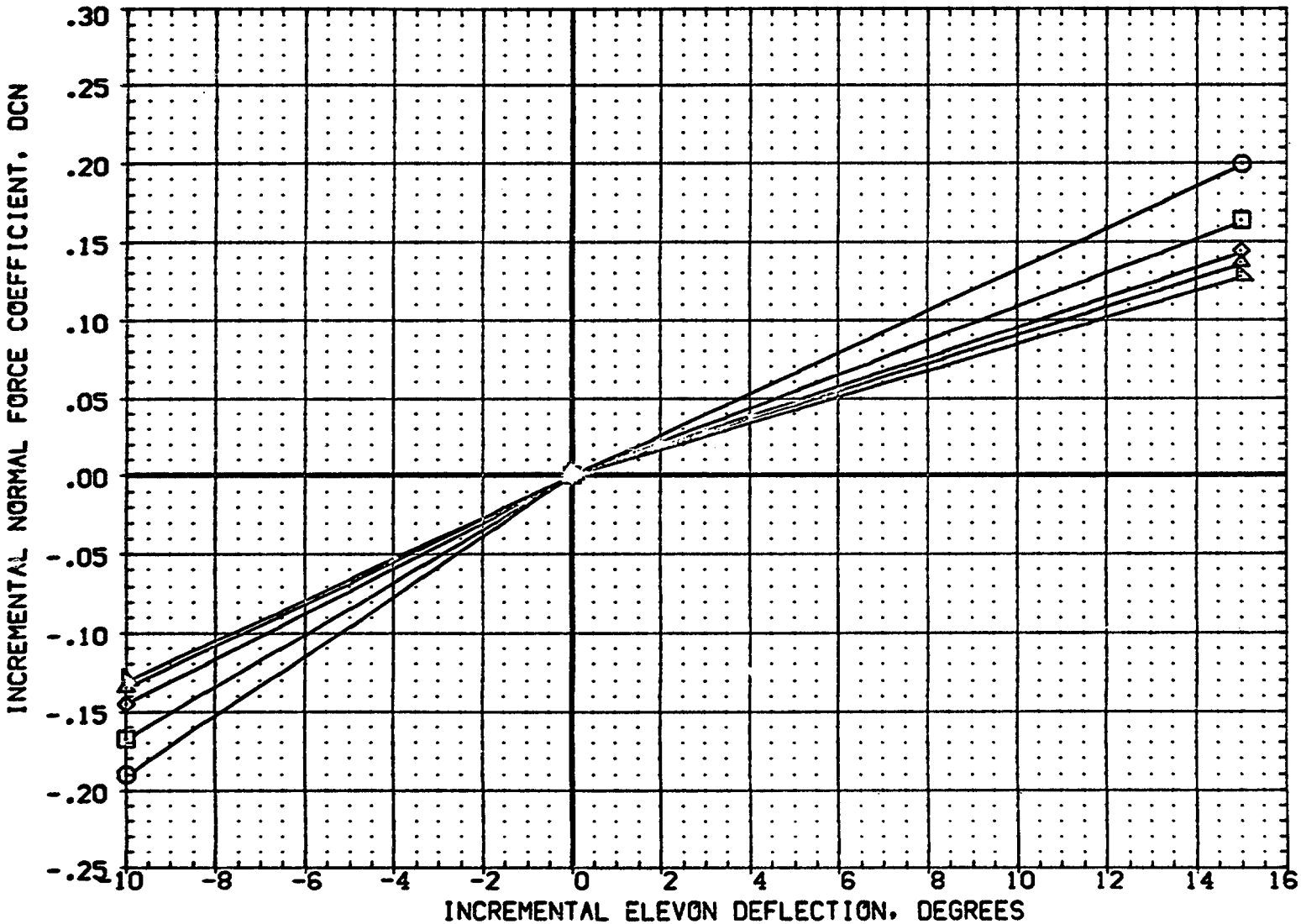


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
□	-4.000	MACH	.215	AILRON	.000	DATASET	DELAVON	DATASET	DELAVON	SREF	4.4122	SQ.FT.
◇	-2.000	BOFLAP	-18.000	NACA/L	.500	EDU021	15.000	EDU052	.000	CREF	19.2268	INCHES
△	-1.000	NACLIP	7.000	NACBTA	5.000	EDU062	-10.000			BREF	37.9348	INCHES
	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.025	SCALE

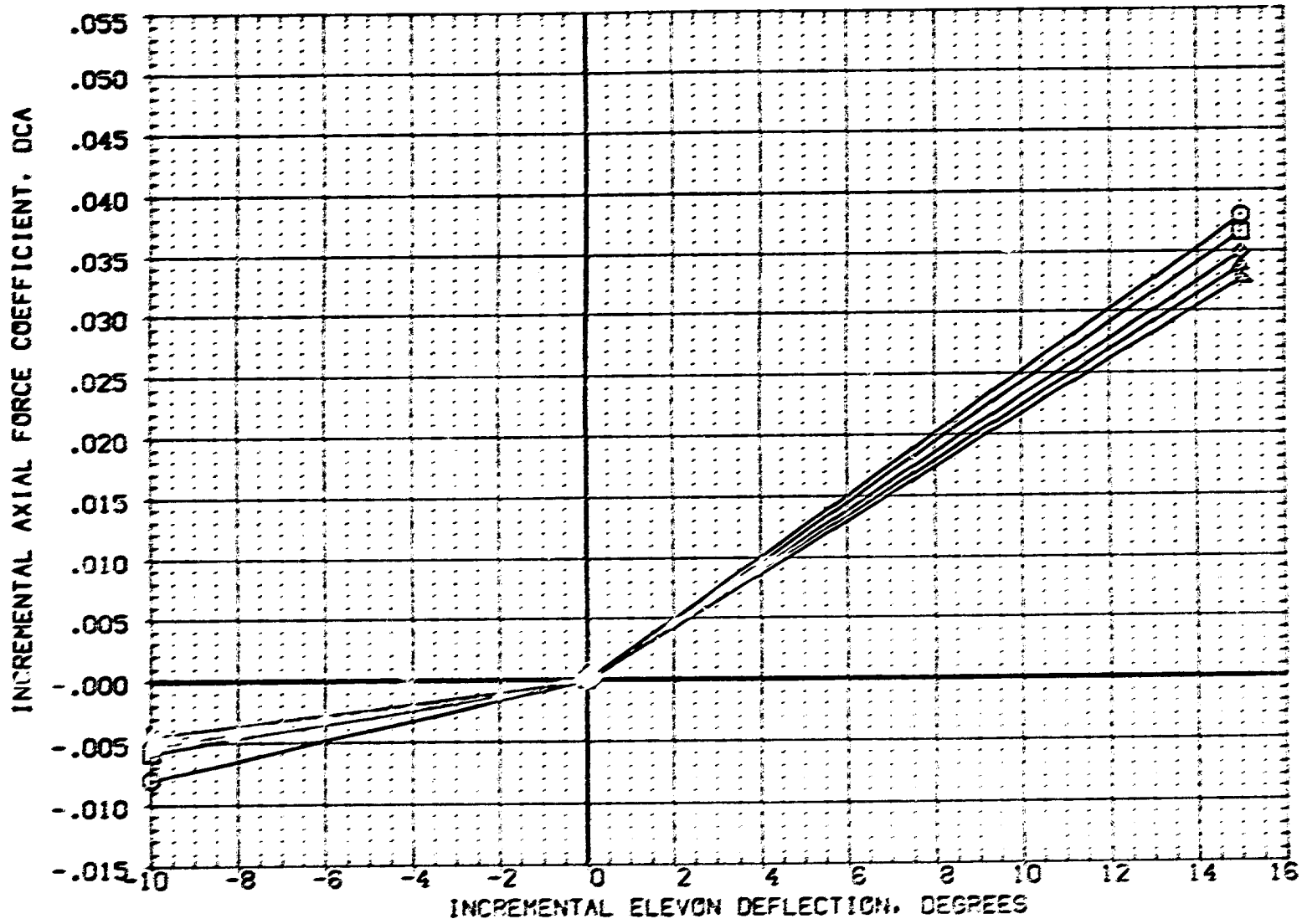


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1080

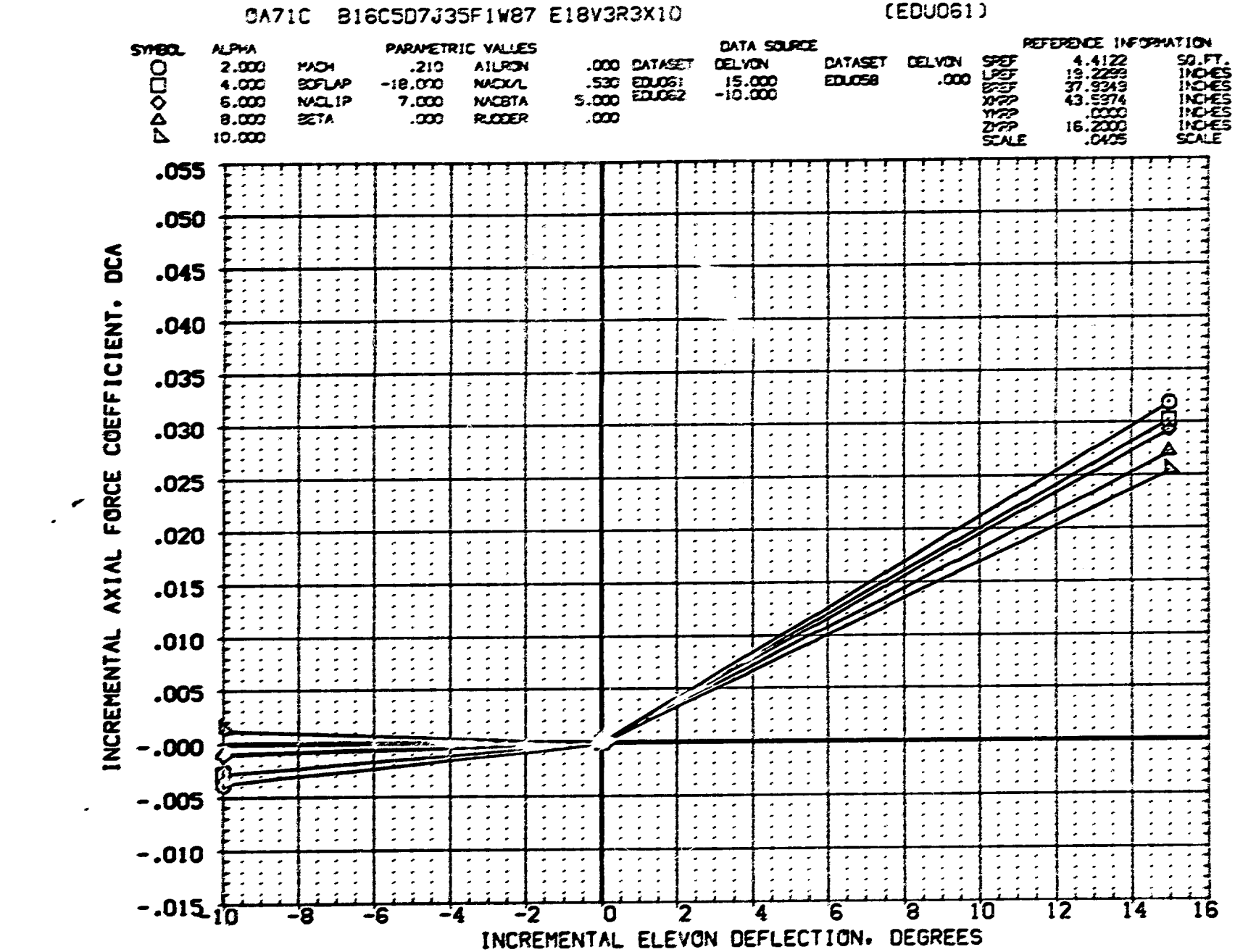


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

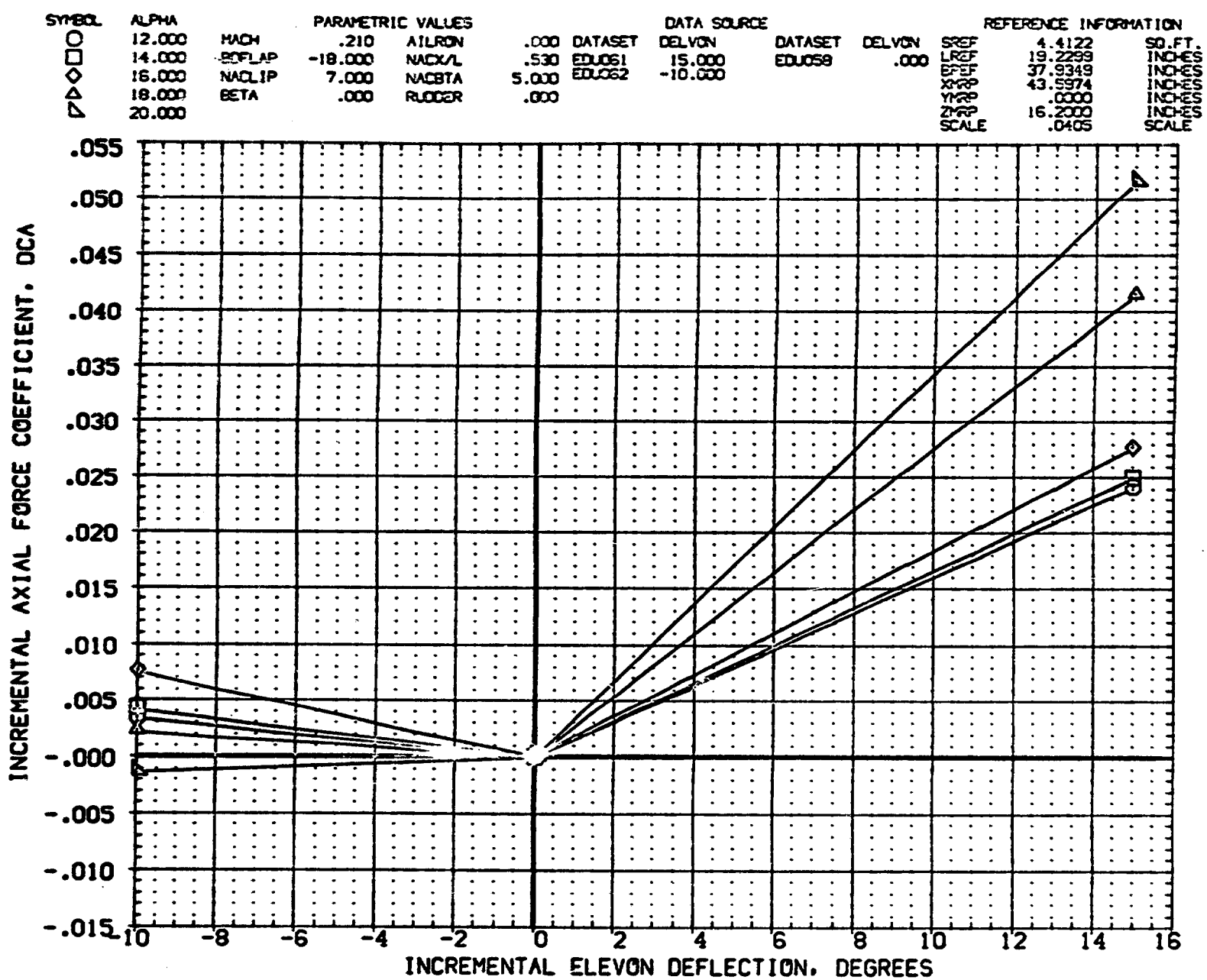


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

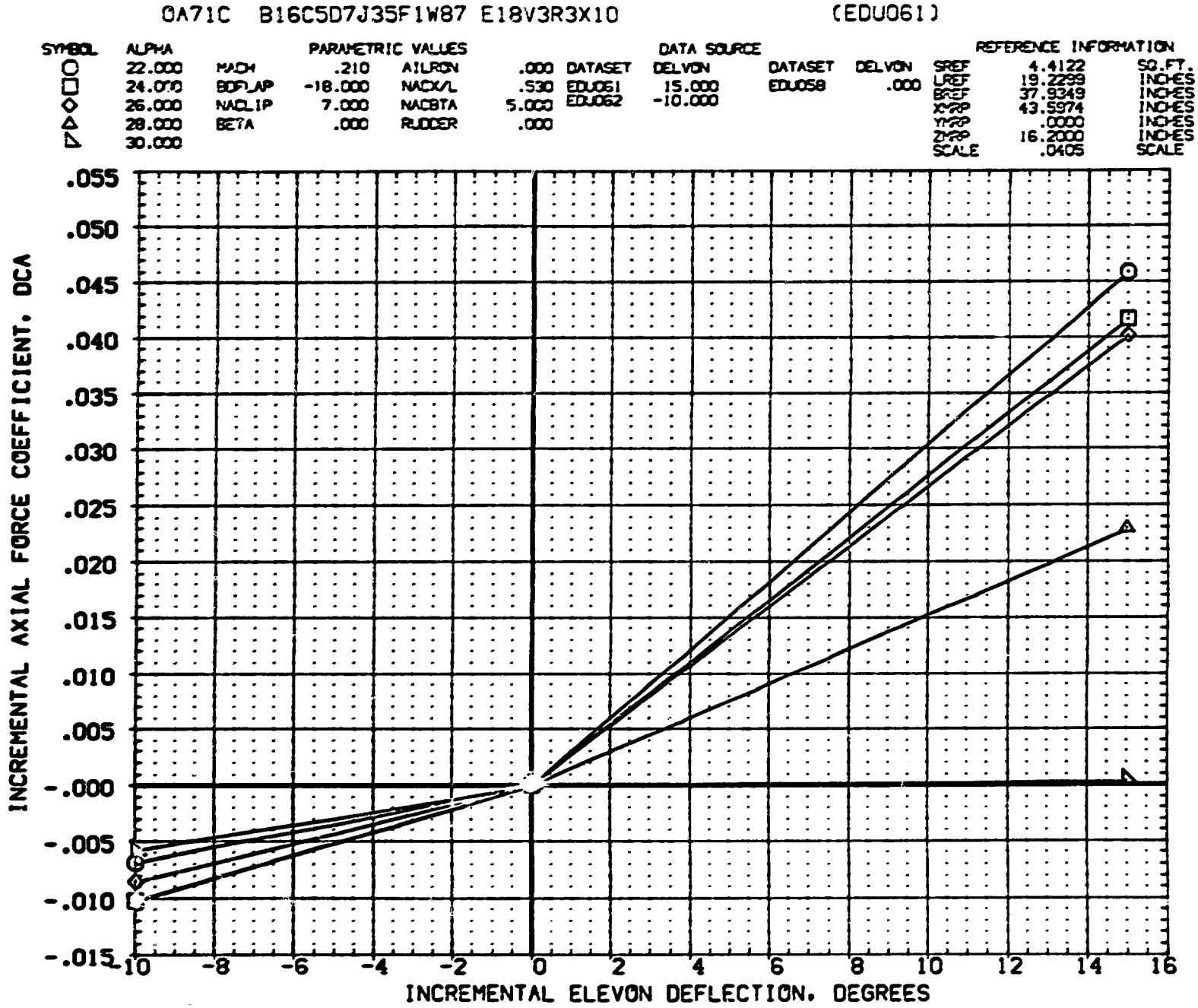


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

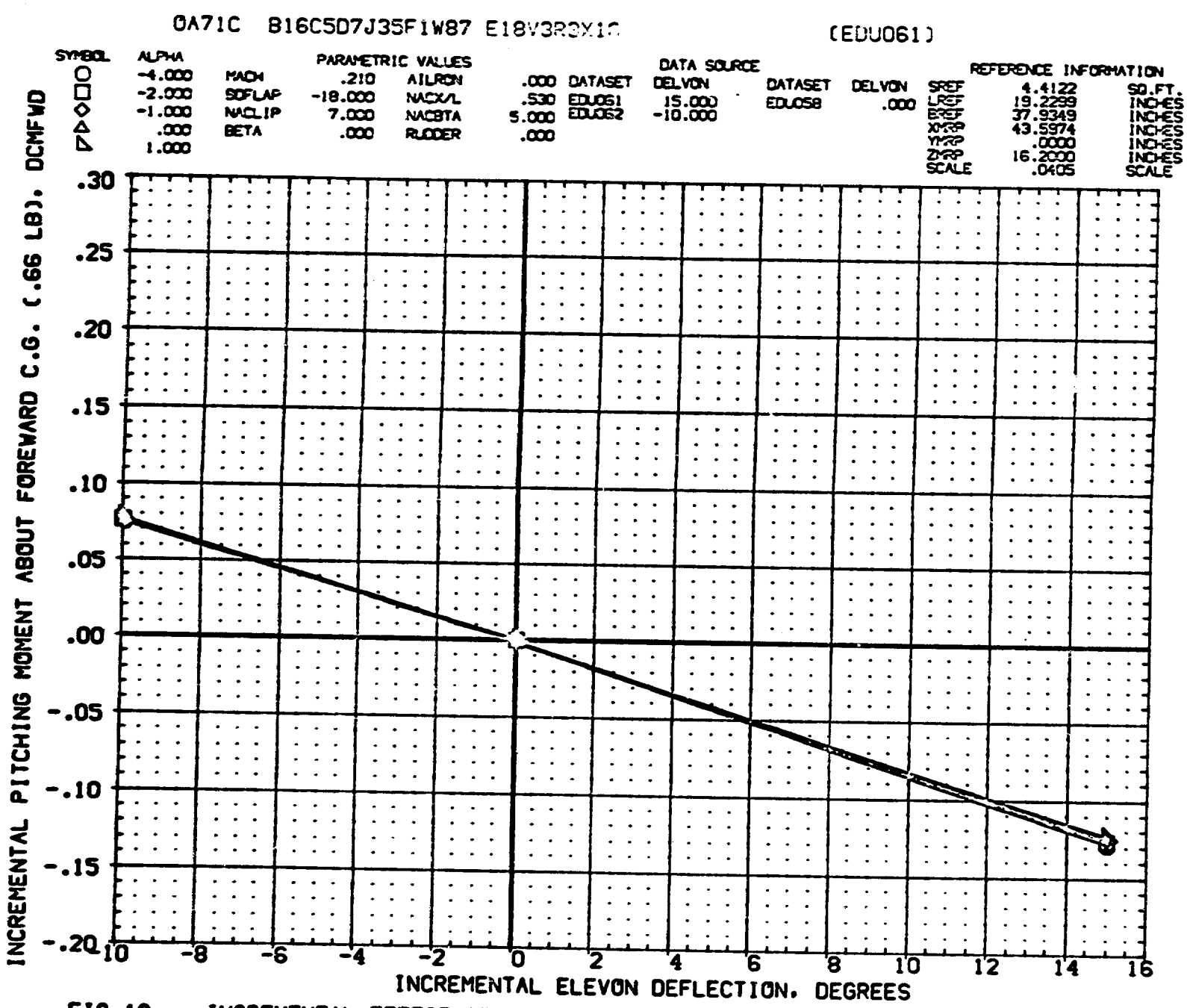


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

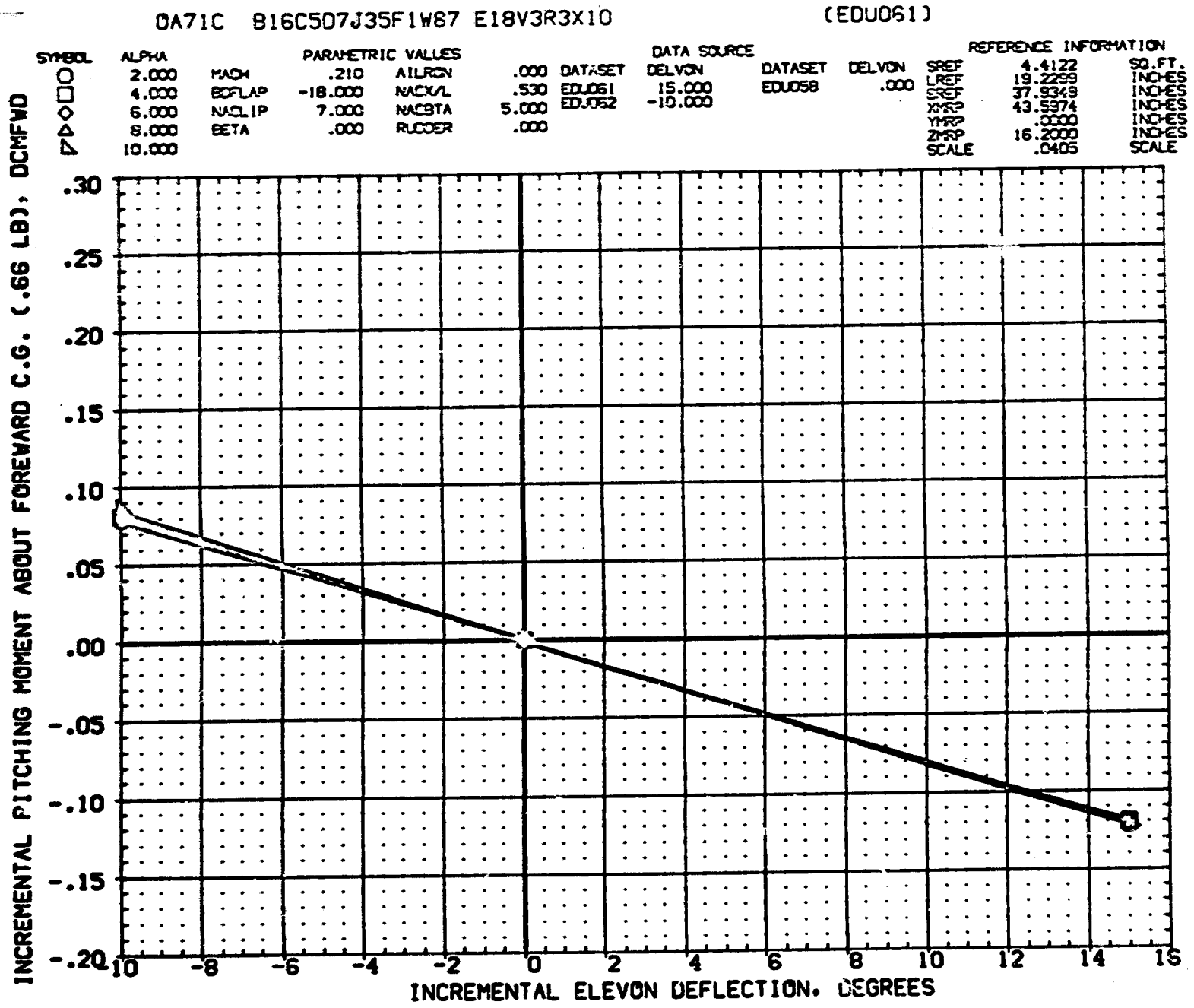


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

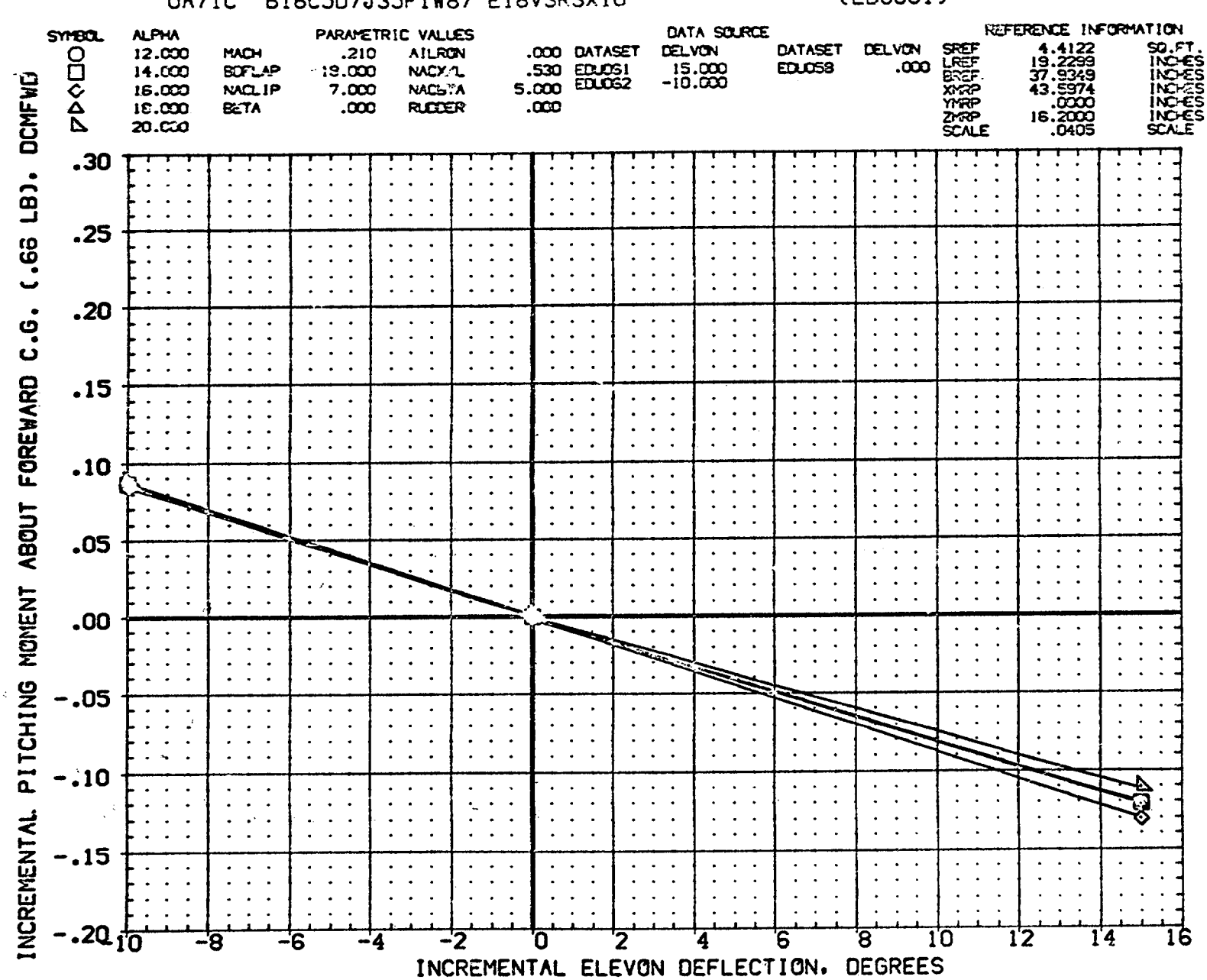


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

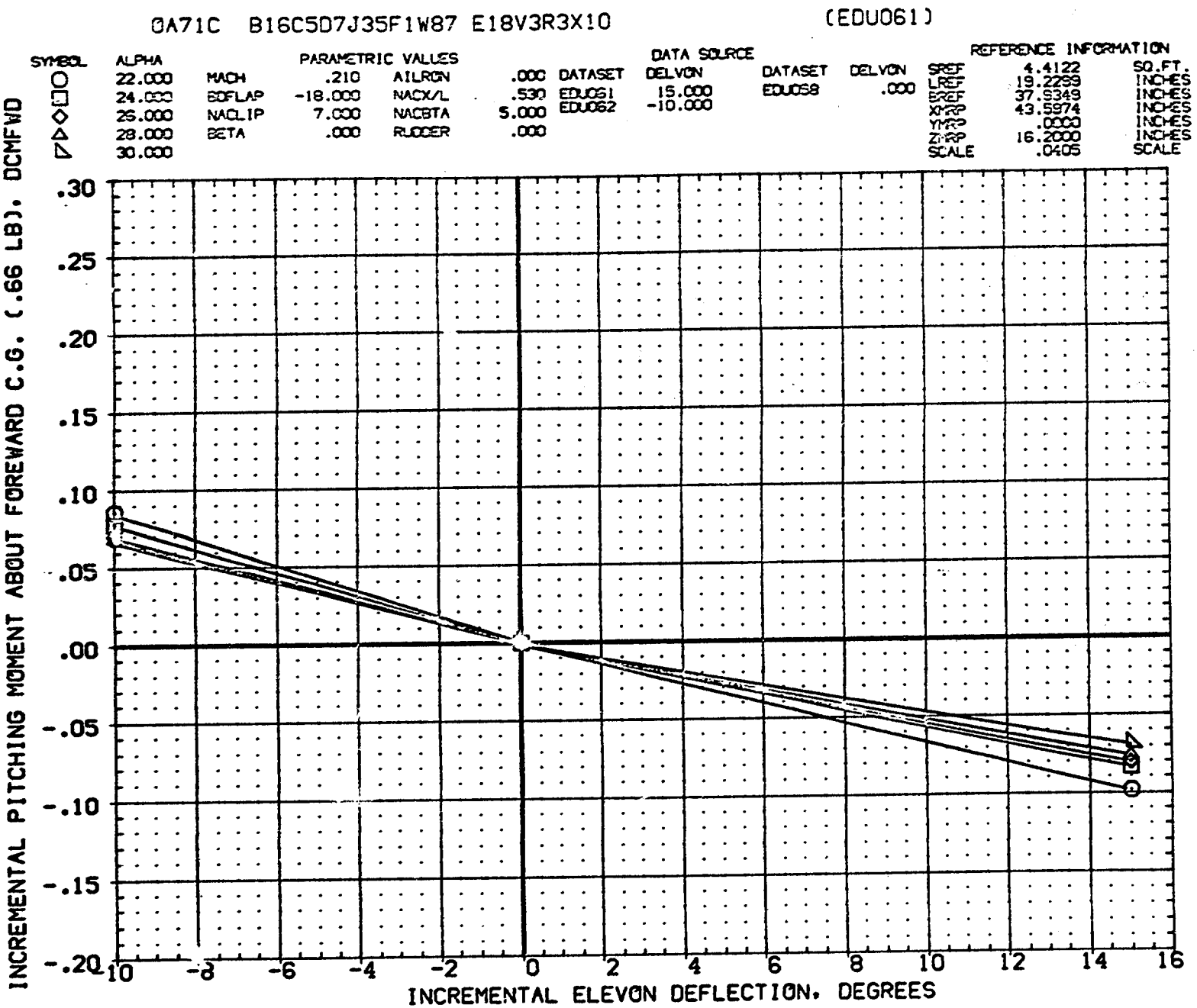


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

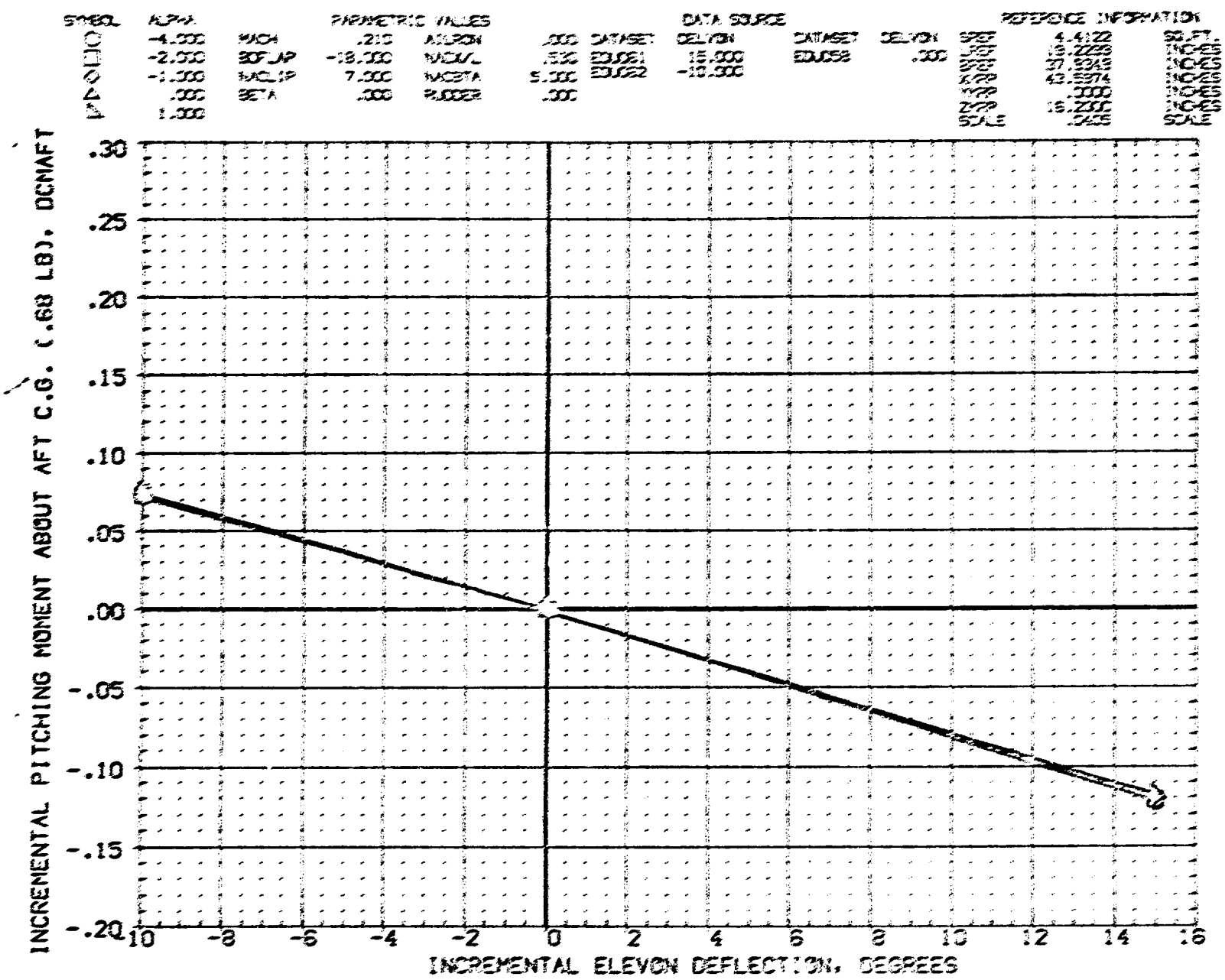


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1080

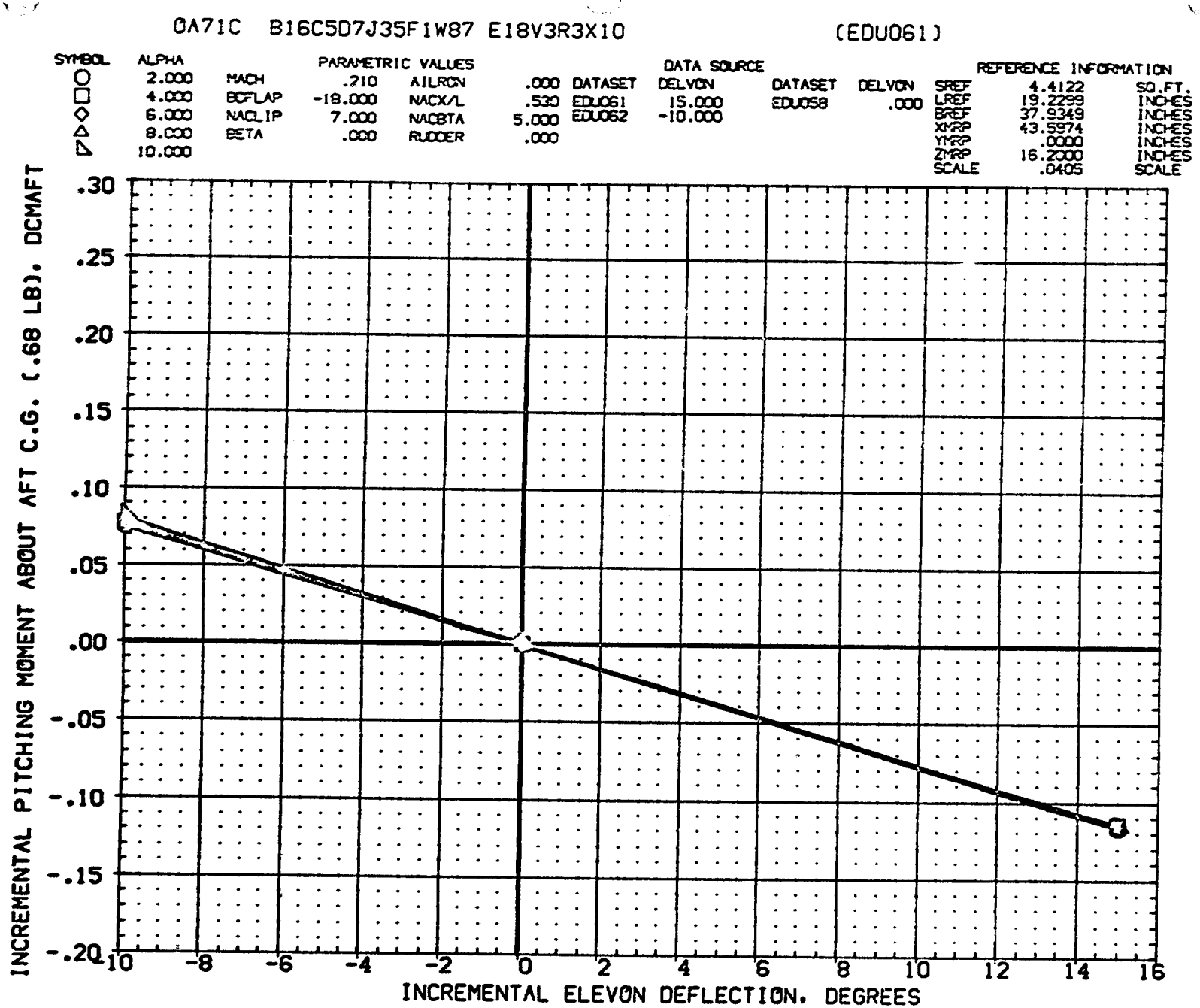


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

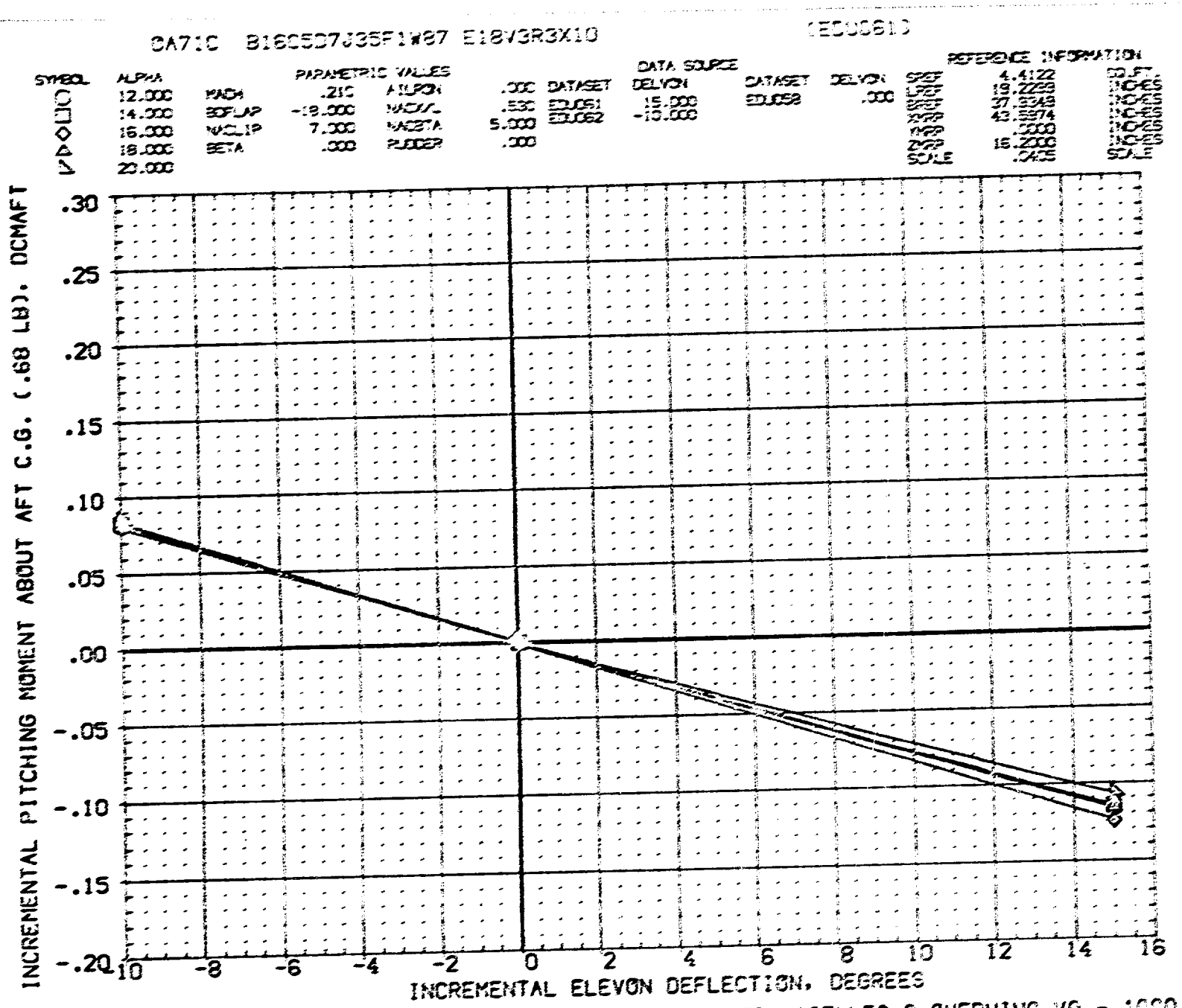


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1080

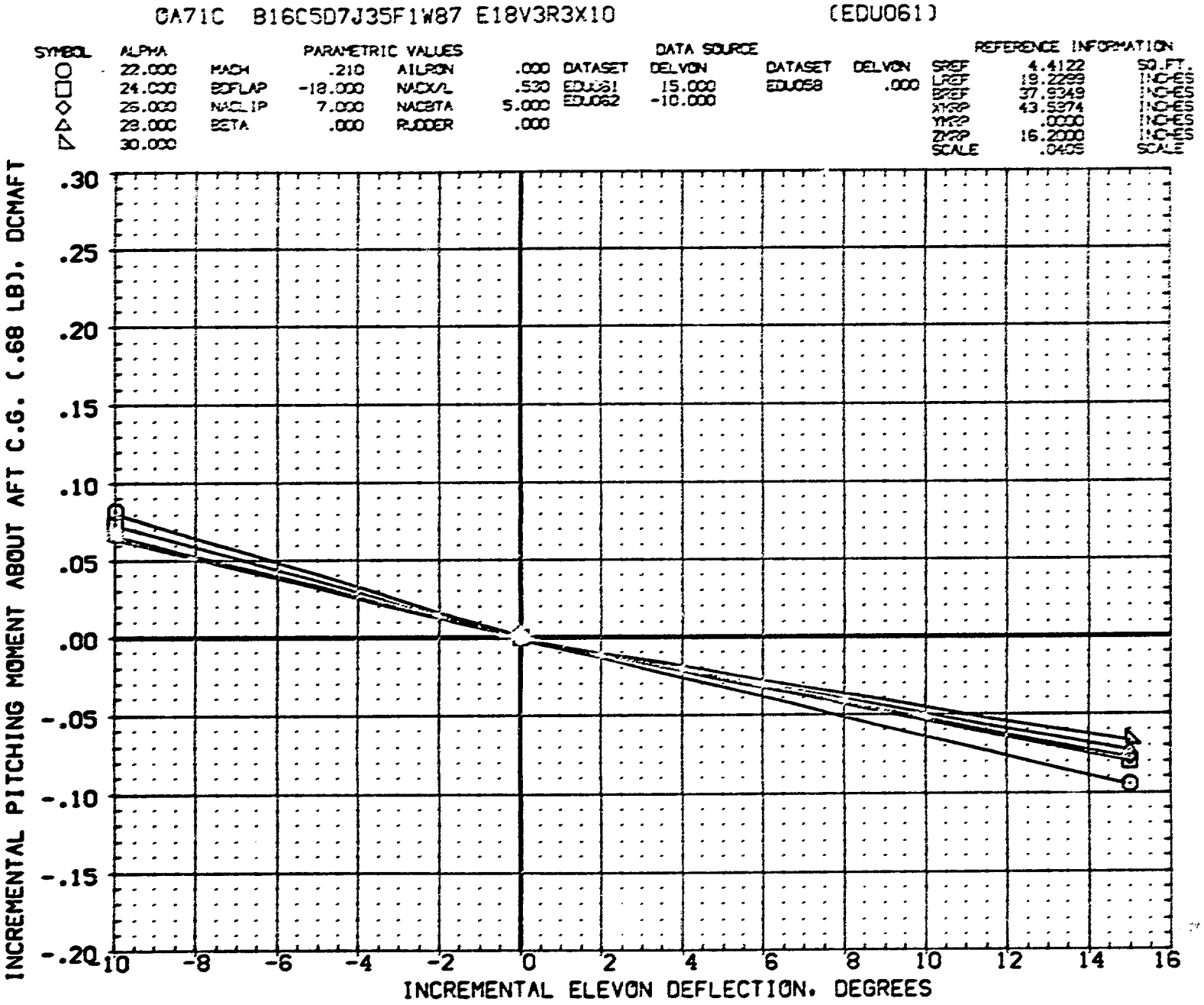


FIG 13 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 1060

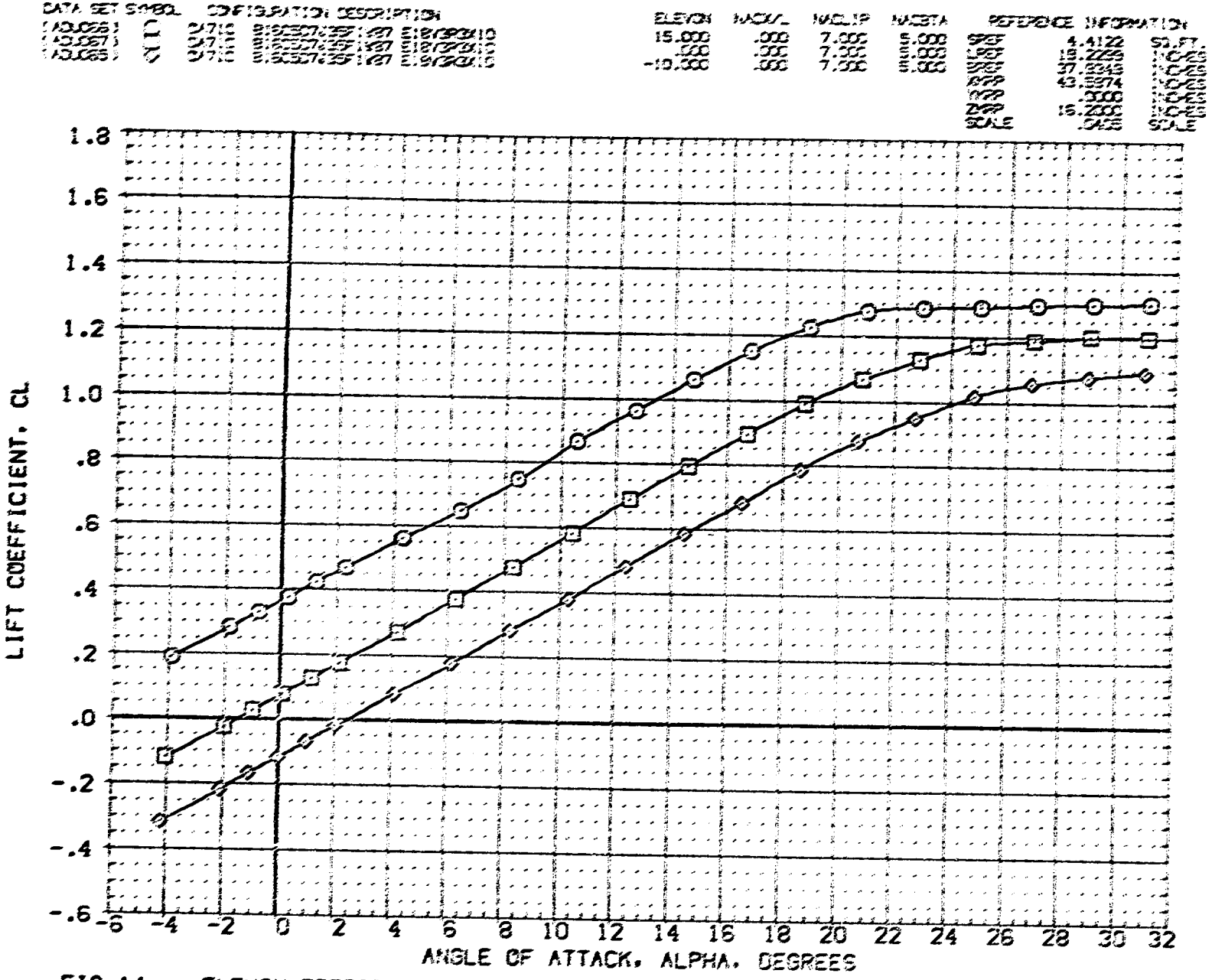


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XC = 350

(A)MACH = .20

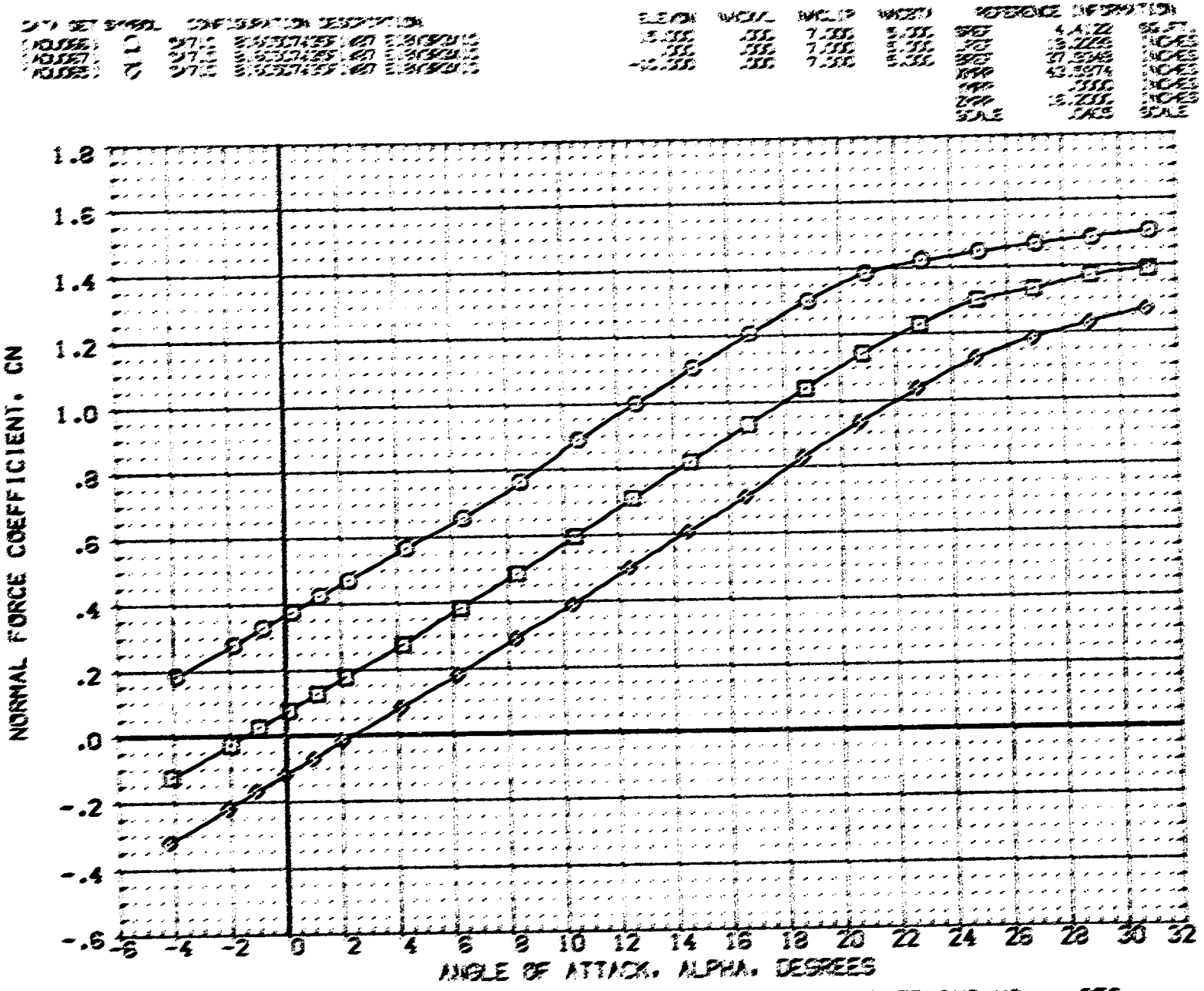


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XD = 950

CA/PACH = .20

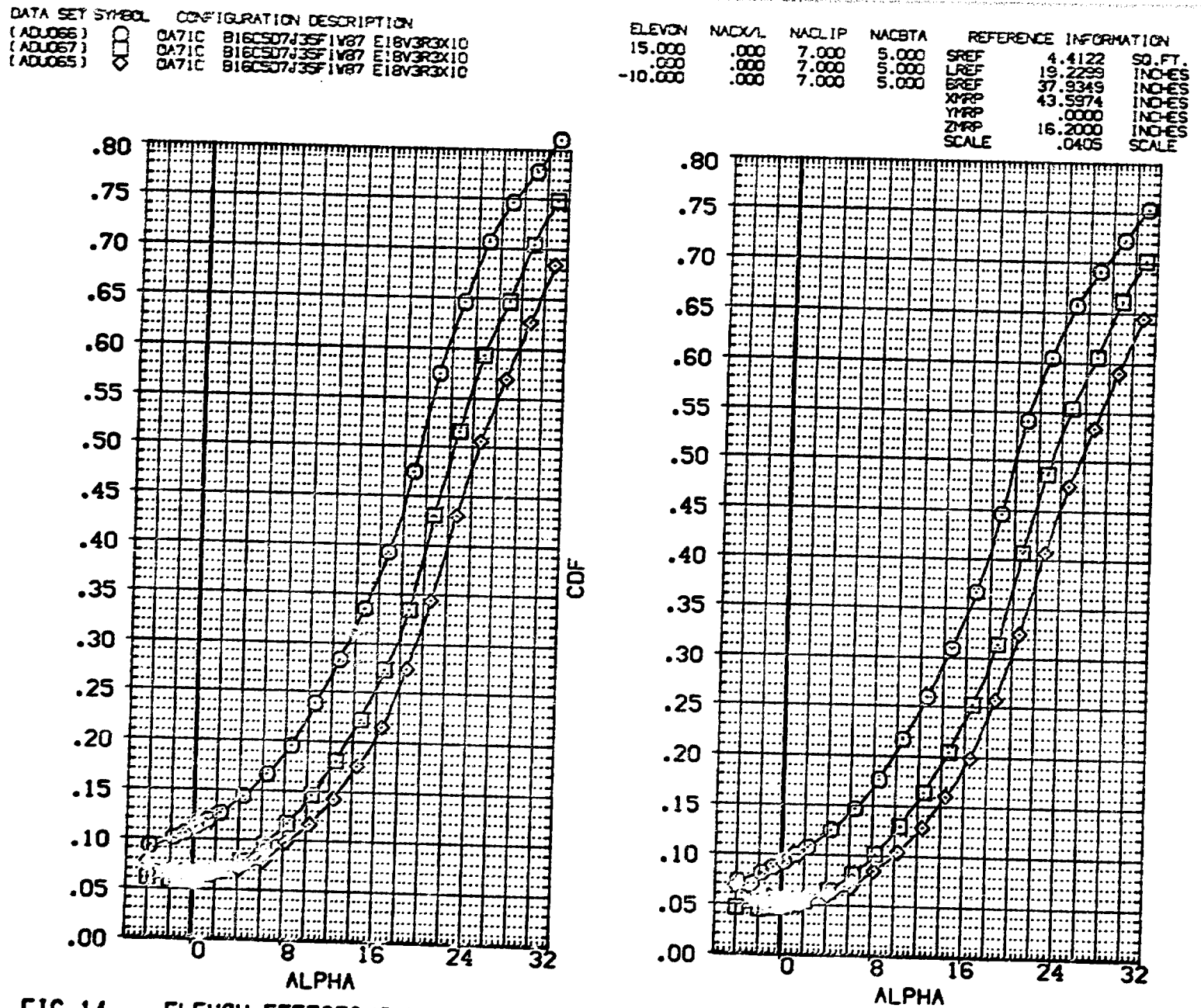


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
[ADL066]	CA71C B16CSD7J35F1V87 E18V3R3X10
[ADL067]	CA71C B16CSD7J35F1V87 E18V3R3X10
[ADL065]	CA71C B16CSD7J35F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

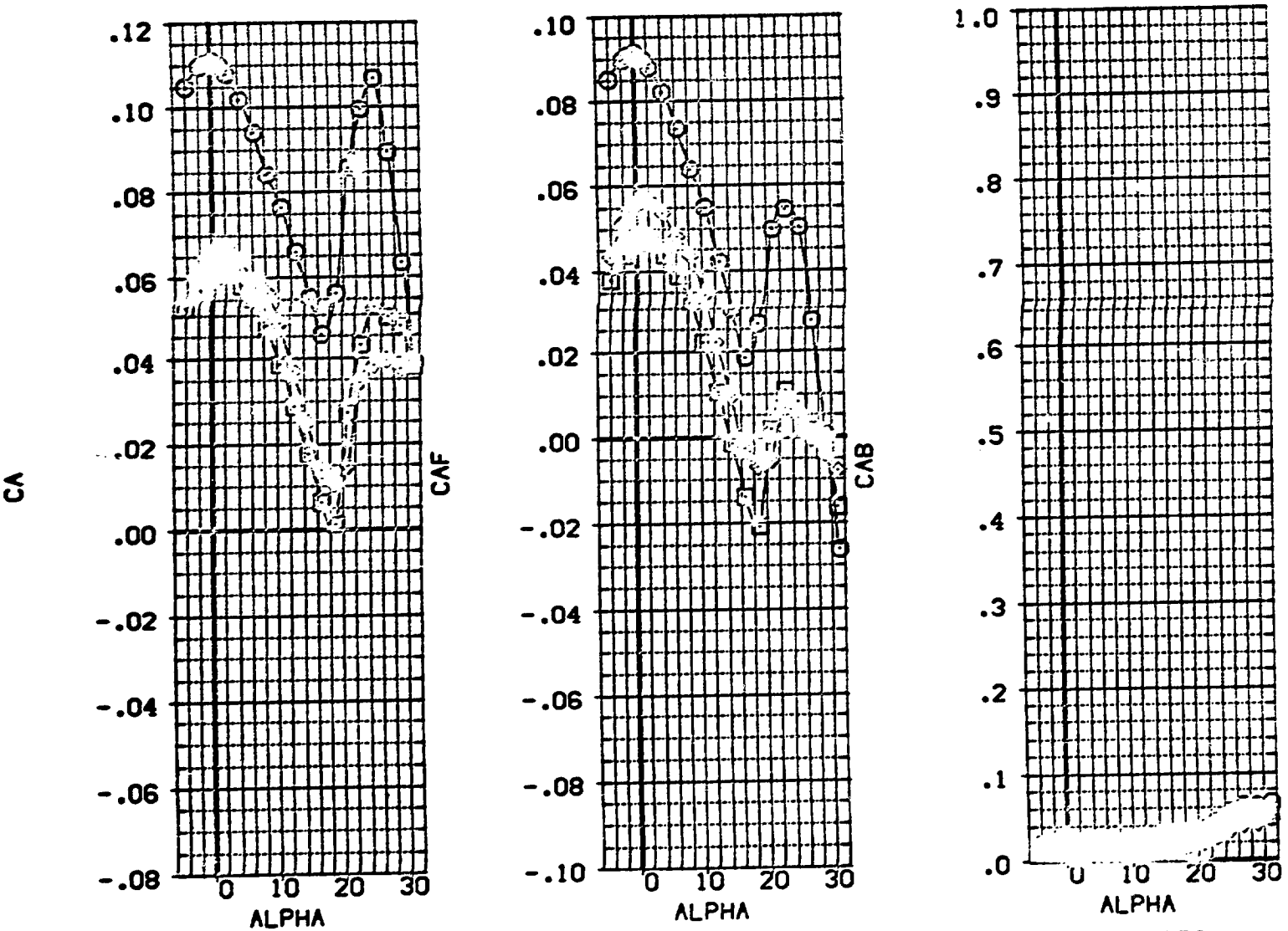


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(ADJ066)	□	DA71C B:EC5C74C3SF1V87 E18V3R3X10
(ADJ067)	□	DA71C B:EC5C74C3SF1V87 E16V3R3X10
(ADJ068)	◇	DA71C B:EC5C74C3SF1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

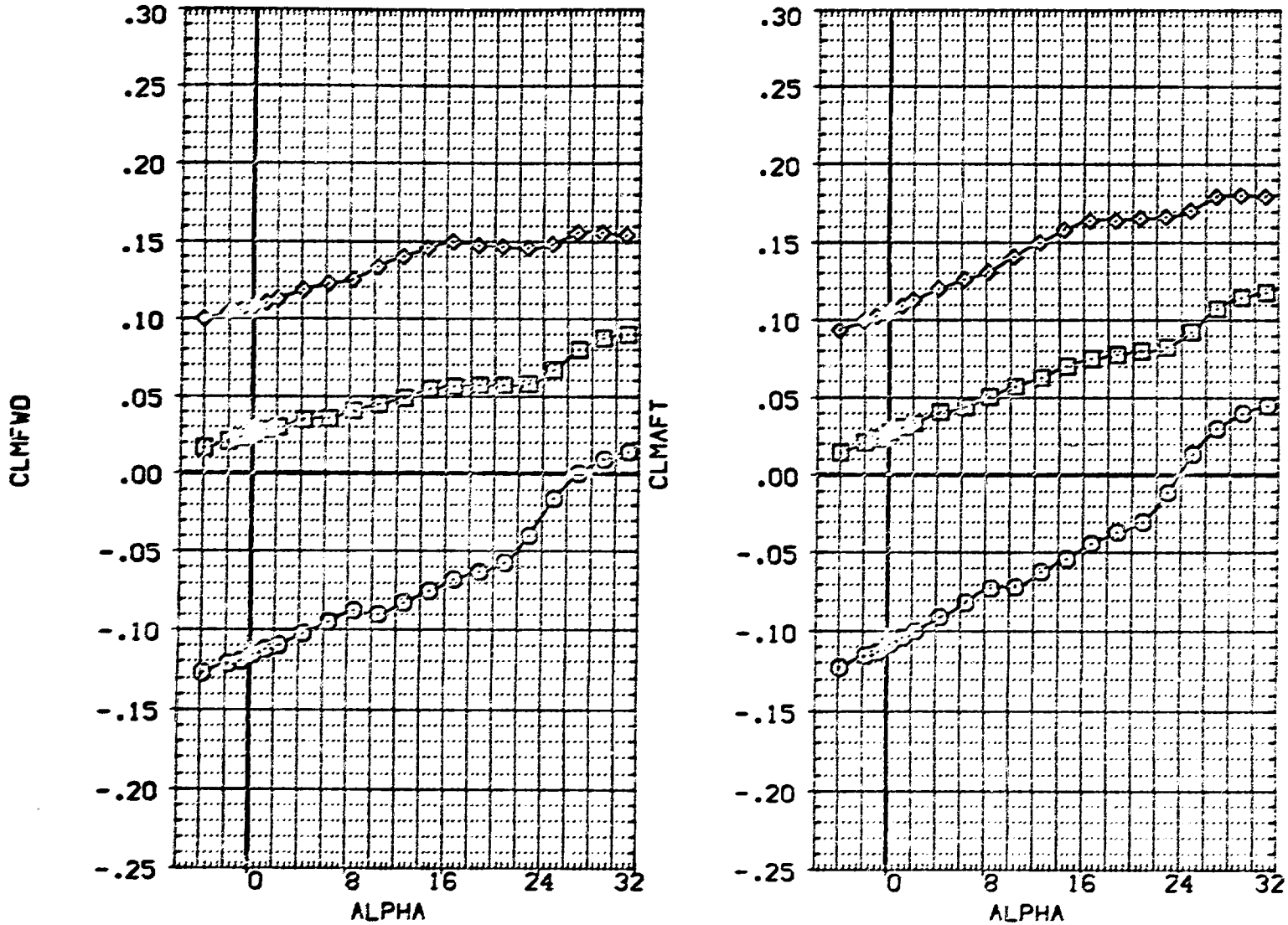


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 950

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ADL065)	□	CA71C B1SCSD7JCSF1V87 E18V3R3X10
(ADL067)	◇	CA71C B1SCSD7JCSF1V87 E18V3R3X10
(ADL065)		CA71C B1SCSD7JCSF1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2269	INCHES
BREF	37.9343	INCHES
XMRP	43.9974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0435	SCALE

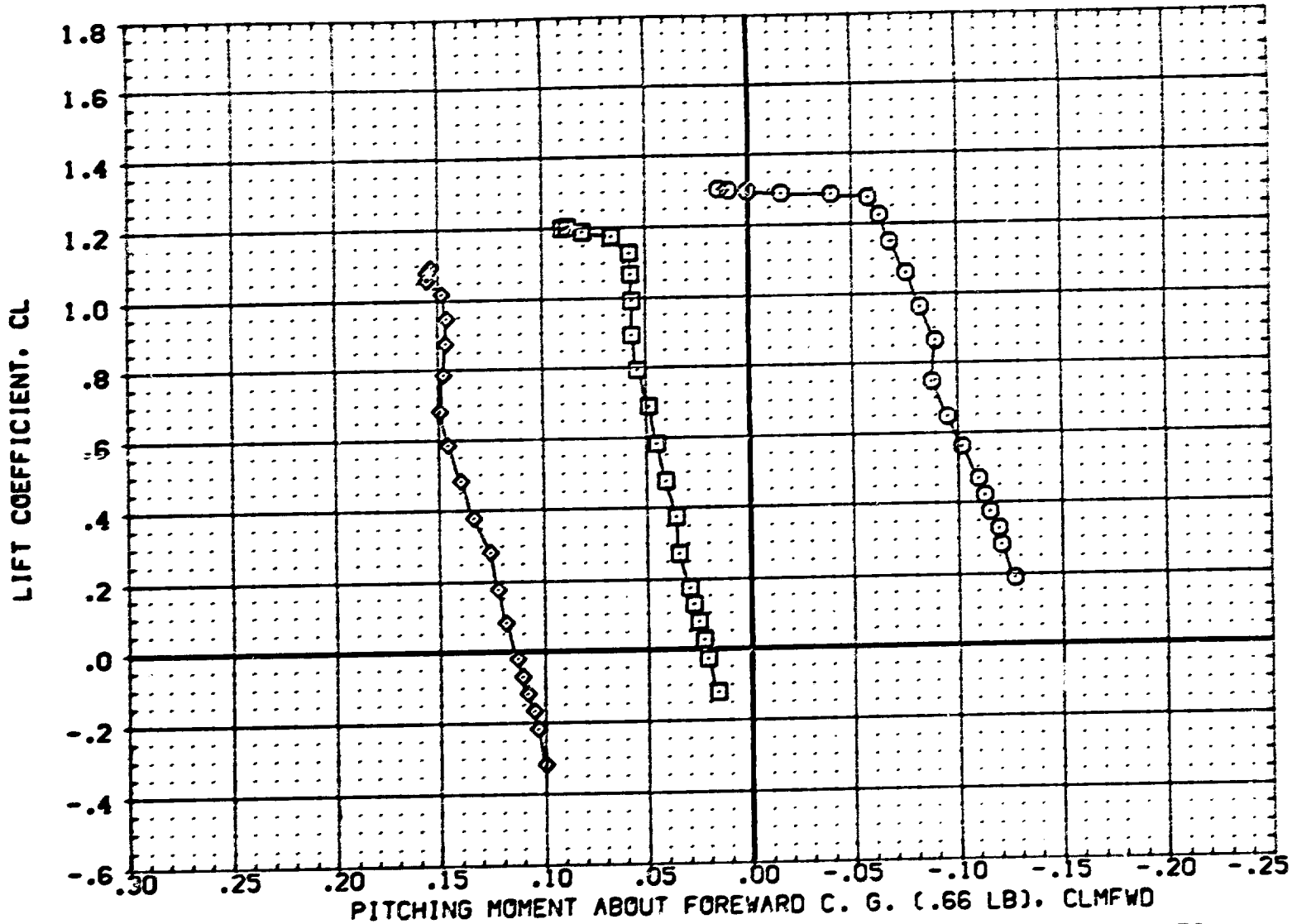


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 950

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACXL	NACLIP	NACBTA
(ADJ066)	○	CA71C B1EC5D7J35F1V87 E18V3R3X10	15.000	.000	7.000	5.000
(ADJ067)	□	CA71C B1EC5D7J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADJ065)	◇	CA71C B1EC5D7J35F1V87 E18V3R3X10	-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2293	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

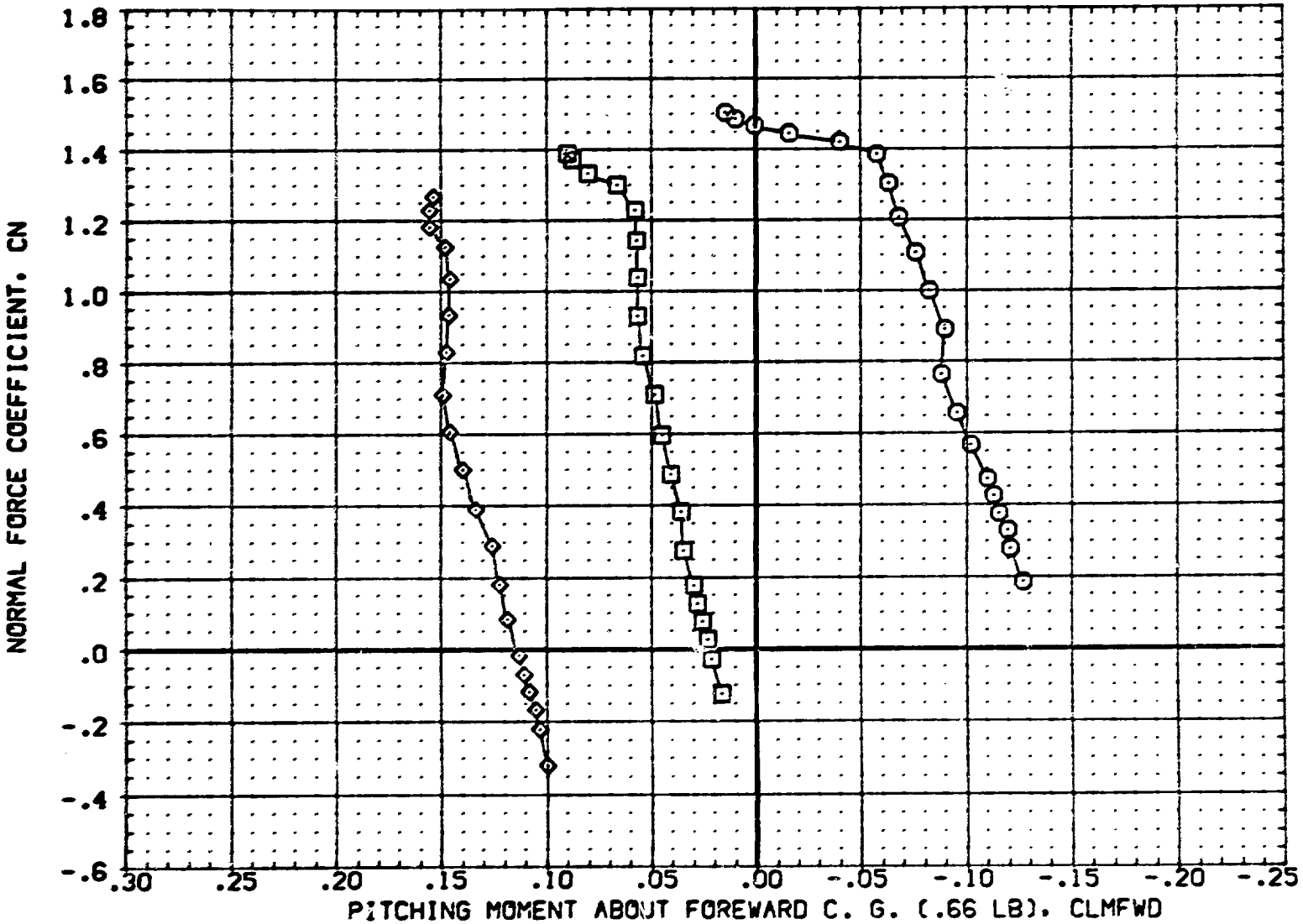


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 950

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU066)	○	DA71C B16C507J35F1V87 E18V3R3X10	15.000	.000	7.000	5.000
(ADU067)	□	DA71C B16C507J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU065)	◇	DA71C B16C507J35F1V87 E18V3R3X10	-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

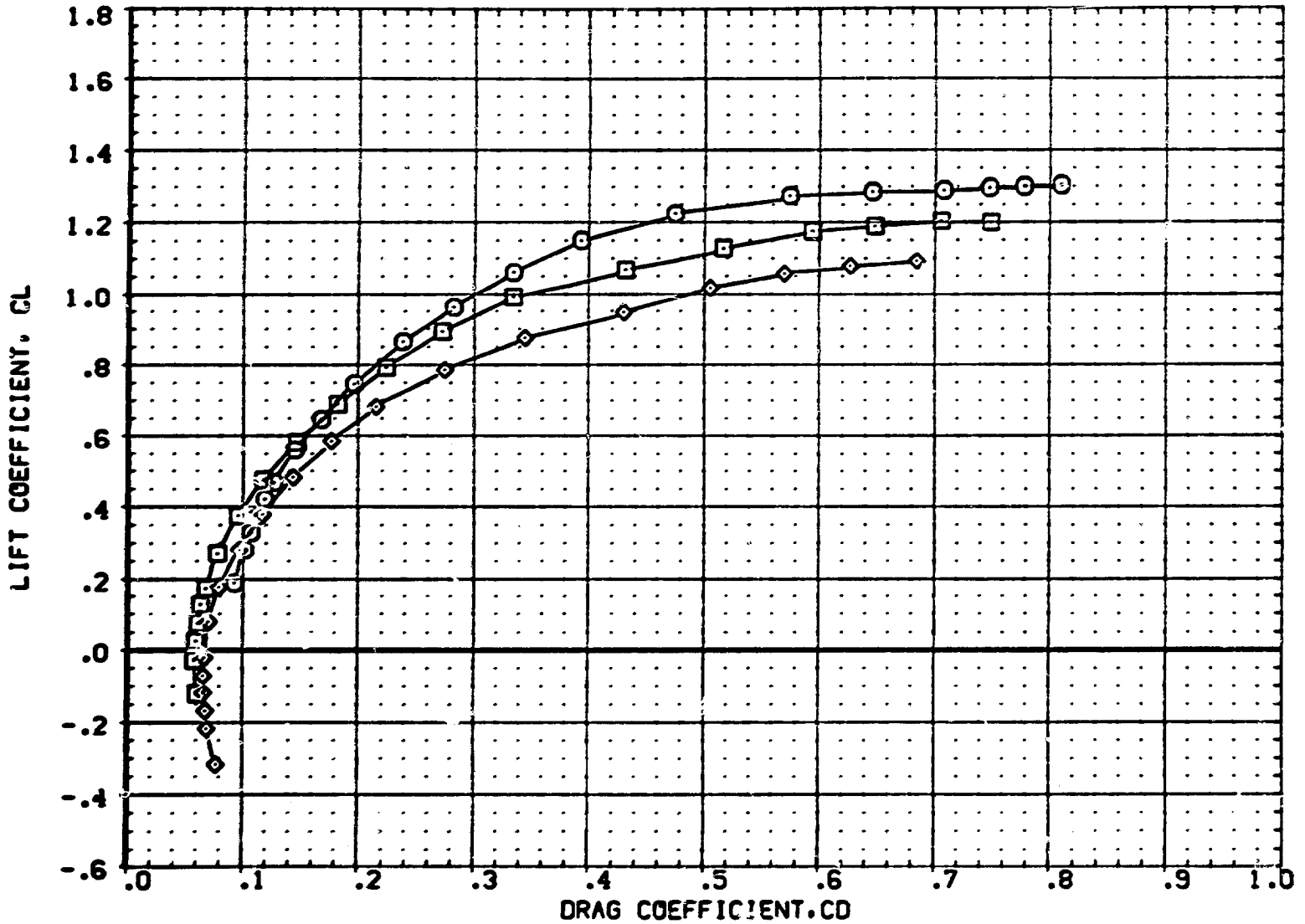


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 950

(A)MACH = .20

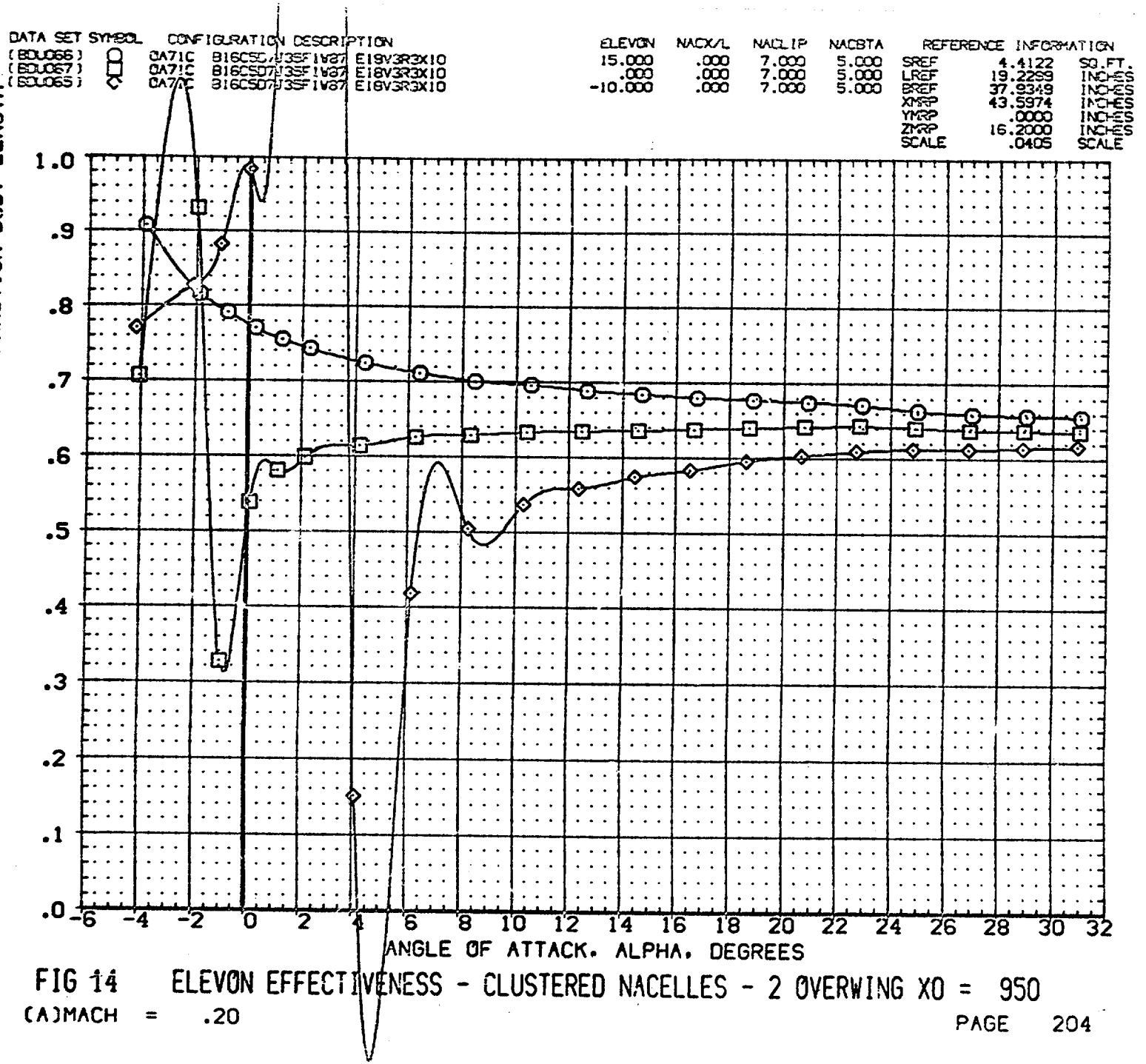


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BDU065)	▢	CA71C B16C5D7J3SF1V87 E18V3R3X10
(BDU067)	□	CA71C B16C5D7J3SF1V87 E18V3R3X10
(BDU055)	◇	CA71C B16C5D7J3SF1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACSTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

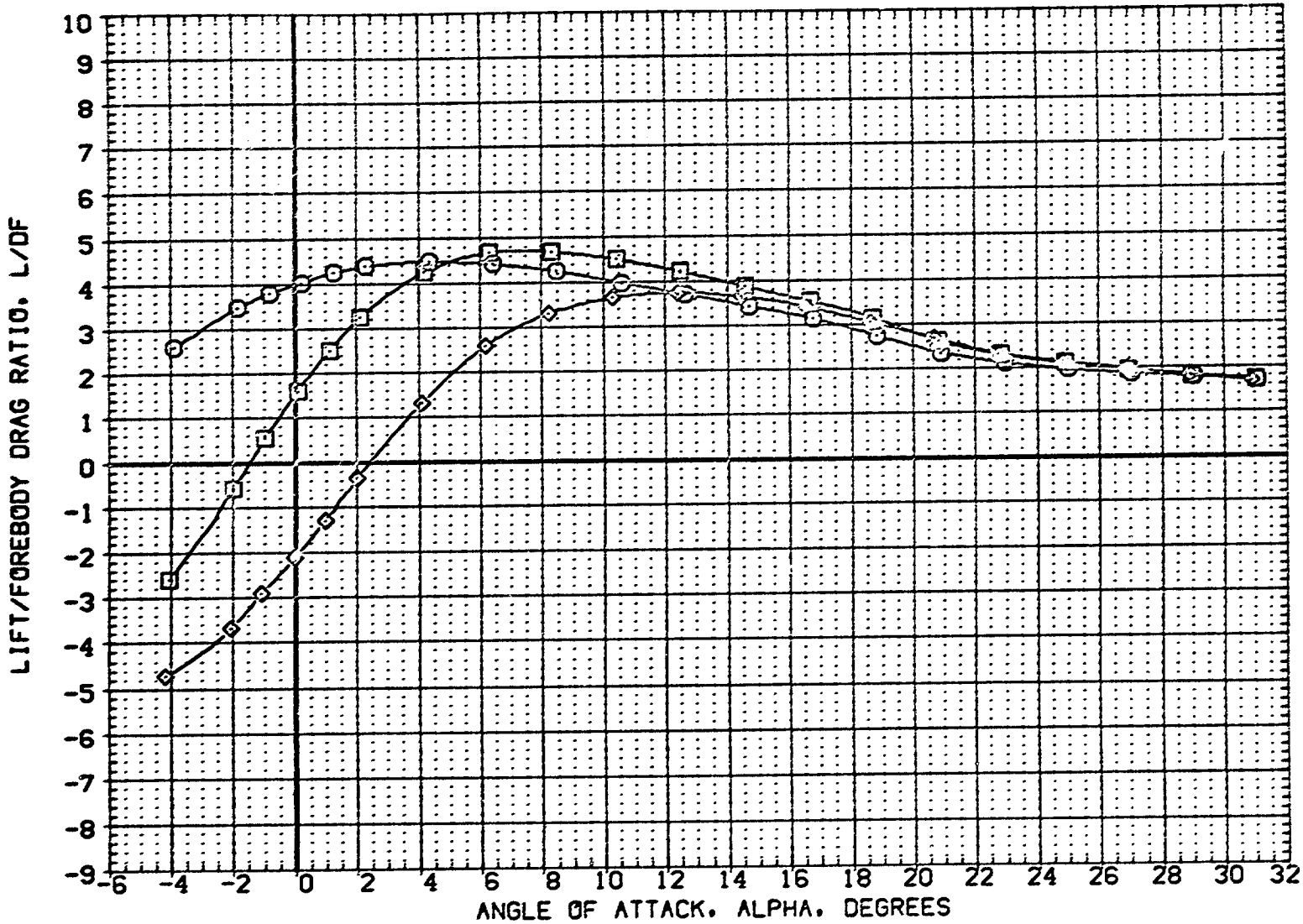


FIG 14 ELEVON EFFECTIVENESS - CLUSTERED NACELLES - 2 OVERWING XO = 950

(A)MACH = .20

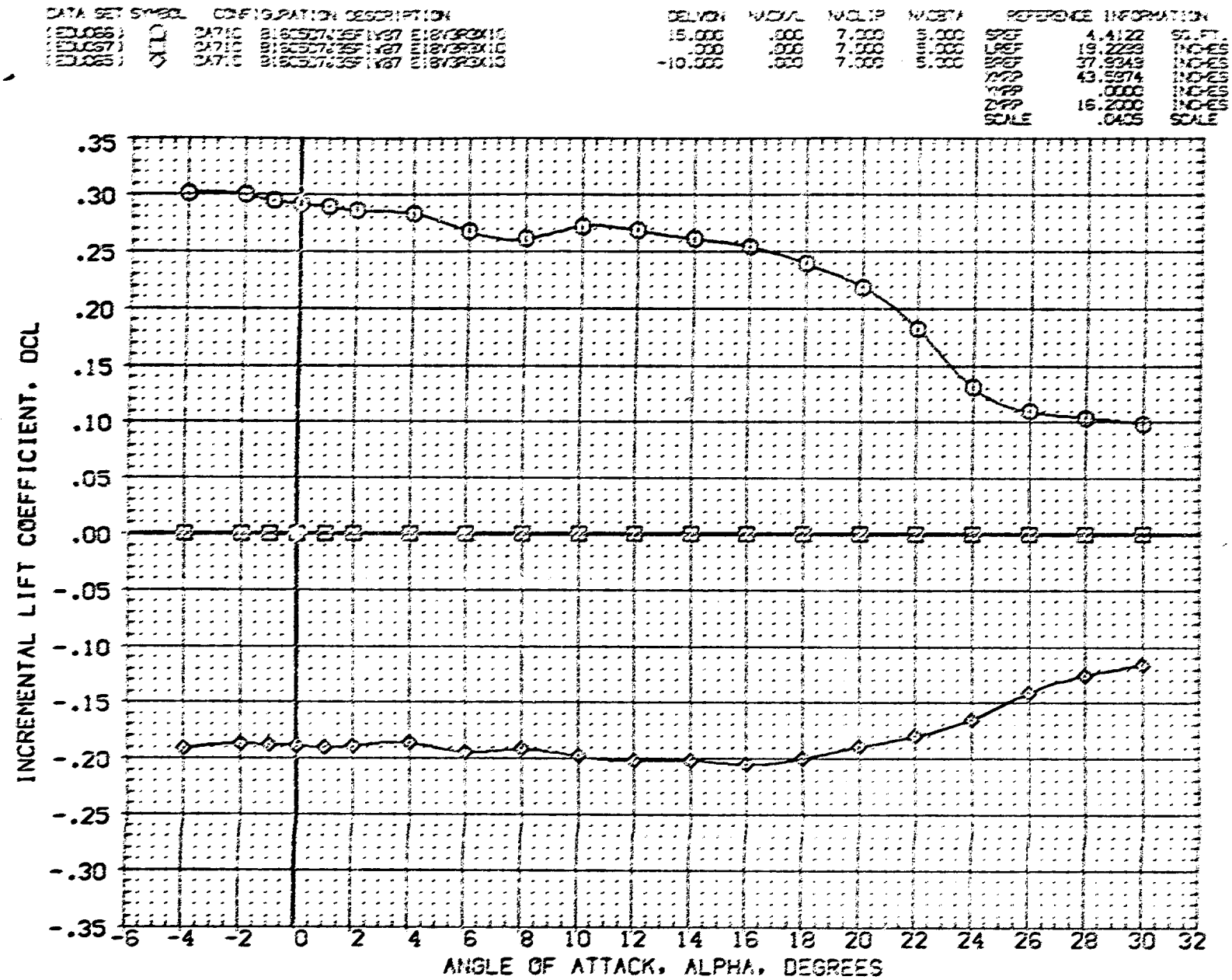


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

(A)MACH = .21

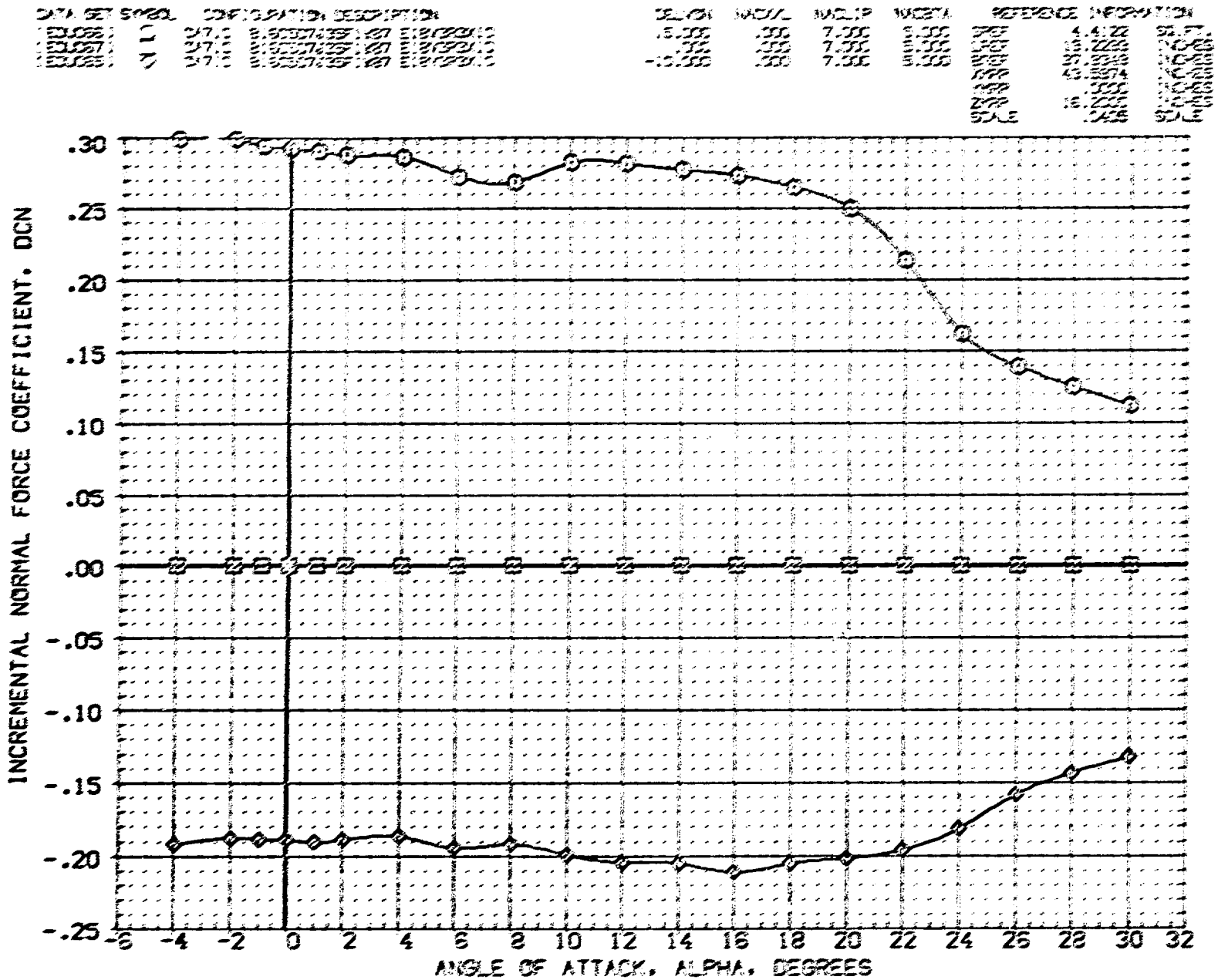


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XB = 950

CA)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(EDU066)	DA71C B16CS07433F1V87 E18V3R3X10
(EDU067)	DA71C B15CS07433F1V87 E18V3R3X10
(EDU065)	DA71C B15CS07433F1V87 E18V3R3X10

DELYON	NACXL	NACLIP	NACSTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2229	INCHES
BREF	37.5349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	15.2000	INCHES
SCALE	.0405	SCALE

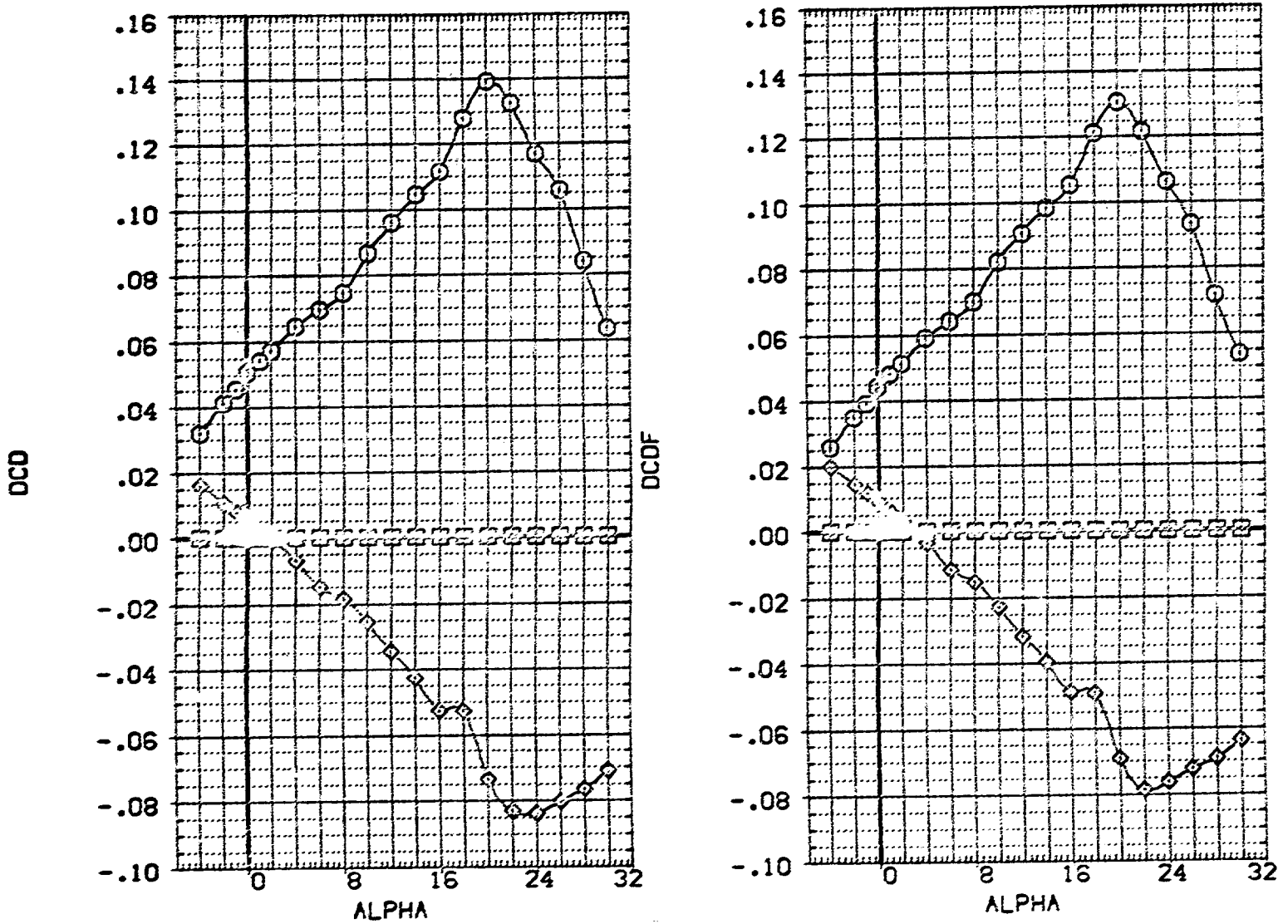


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

(A)MACH = .21

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(EDUC86)	□	CA71C B16C507d35F1V87 E18V3R2X10
(EDUC87)	△	CA71C B16C507d35F1V87 E18V3R3X10
(EDUC85)	◇	CA71C B16C507d35F1V87 E18V2R3X10

DELVON	NACXCL	NACLIP	NACBTA
15.000	.000	7.000	5.000
.000	.000	7.000	5.000
-10.000	.000	7.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2288	INCHES
BREF	37.9349	INCHES
XRP	43.5974	INCHES
YRP	.0000	INCHES
ZRP	16.2000	INCHES
SCALE	.0405	SCALE

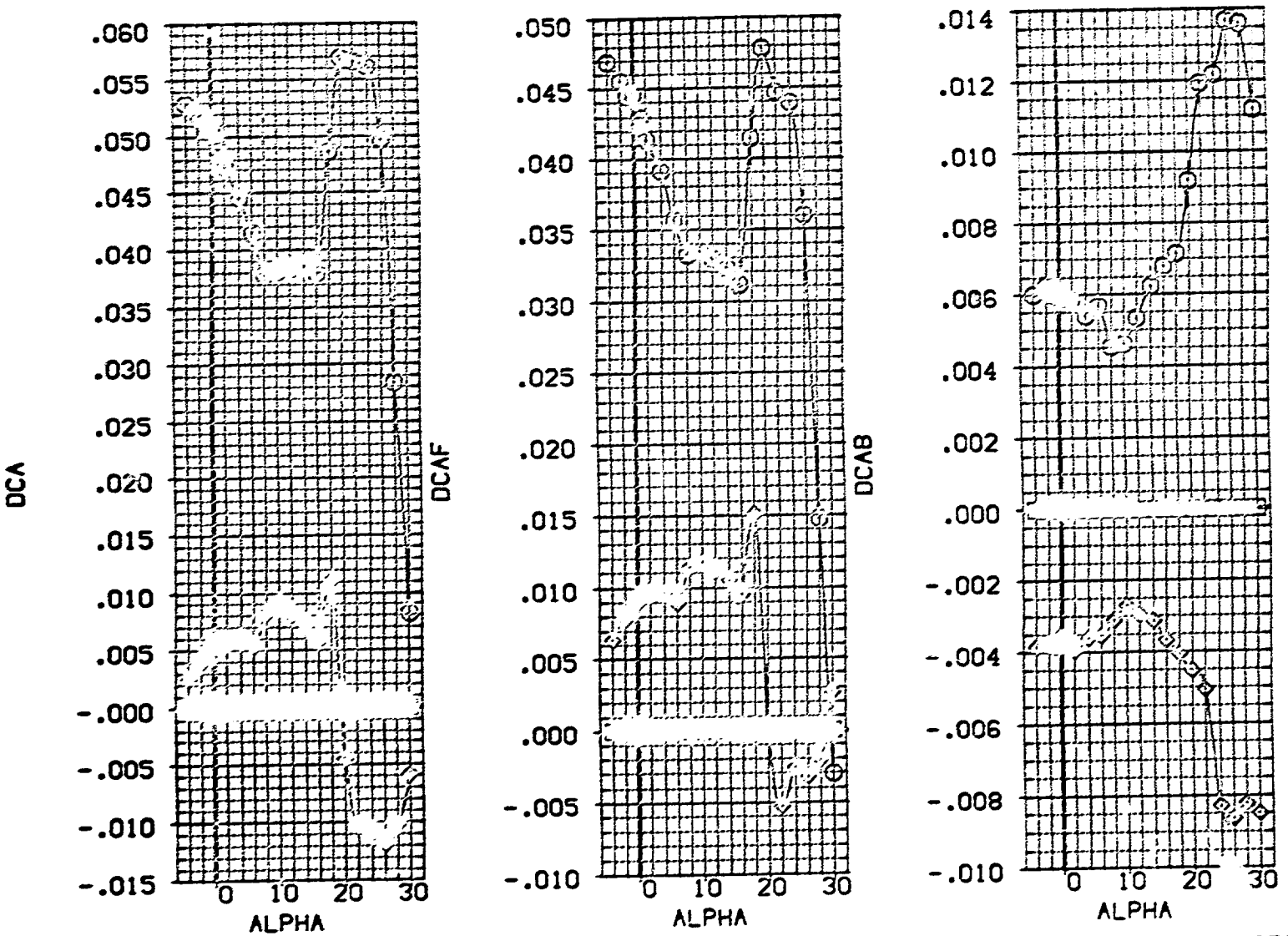


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

(A)MACH = .21

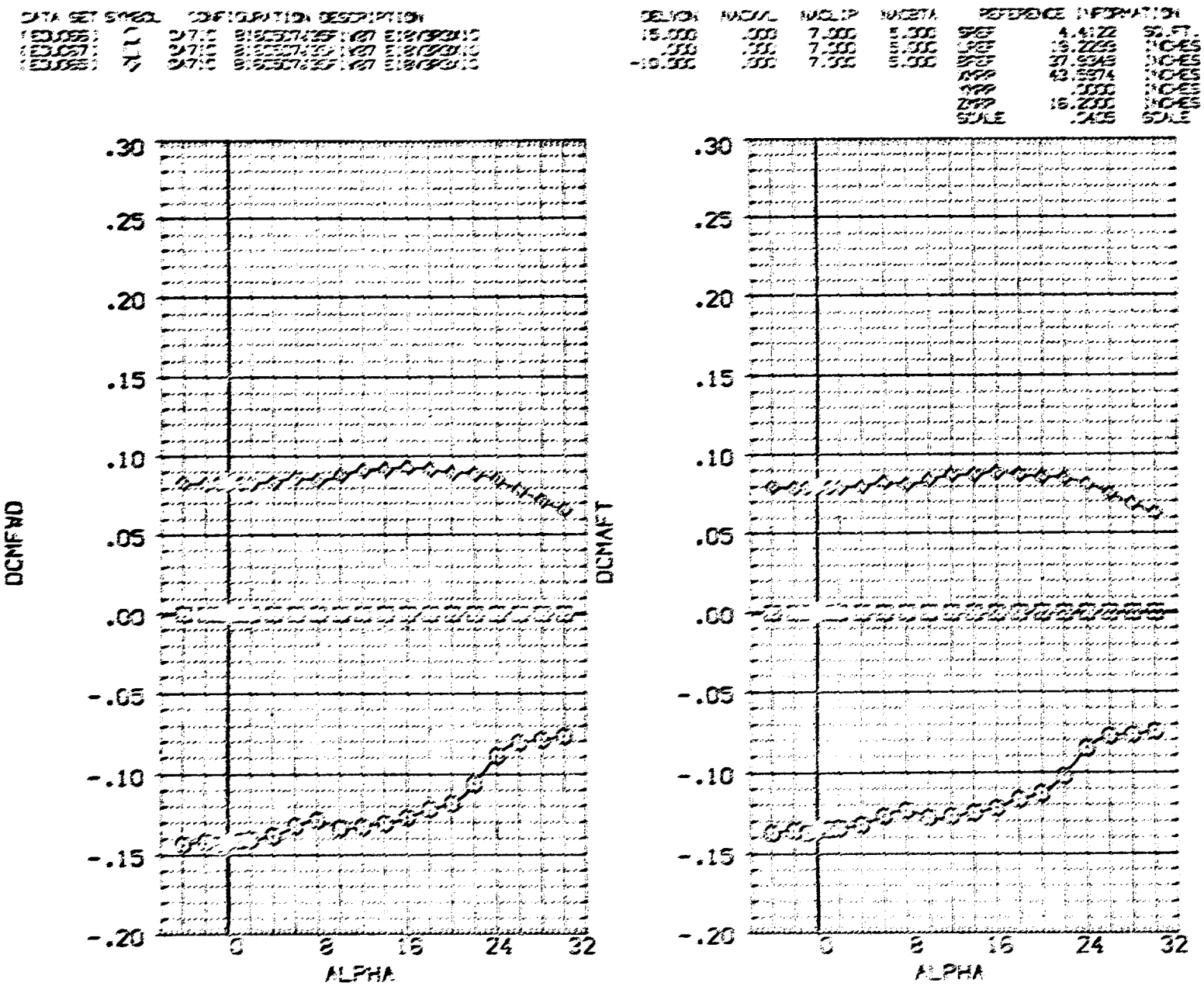


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XC = 950

CAJMACH = .21

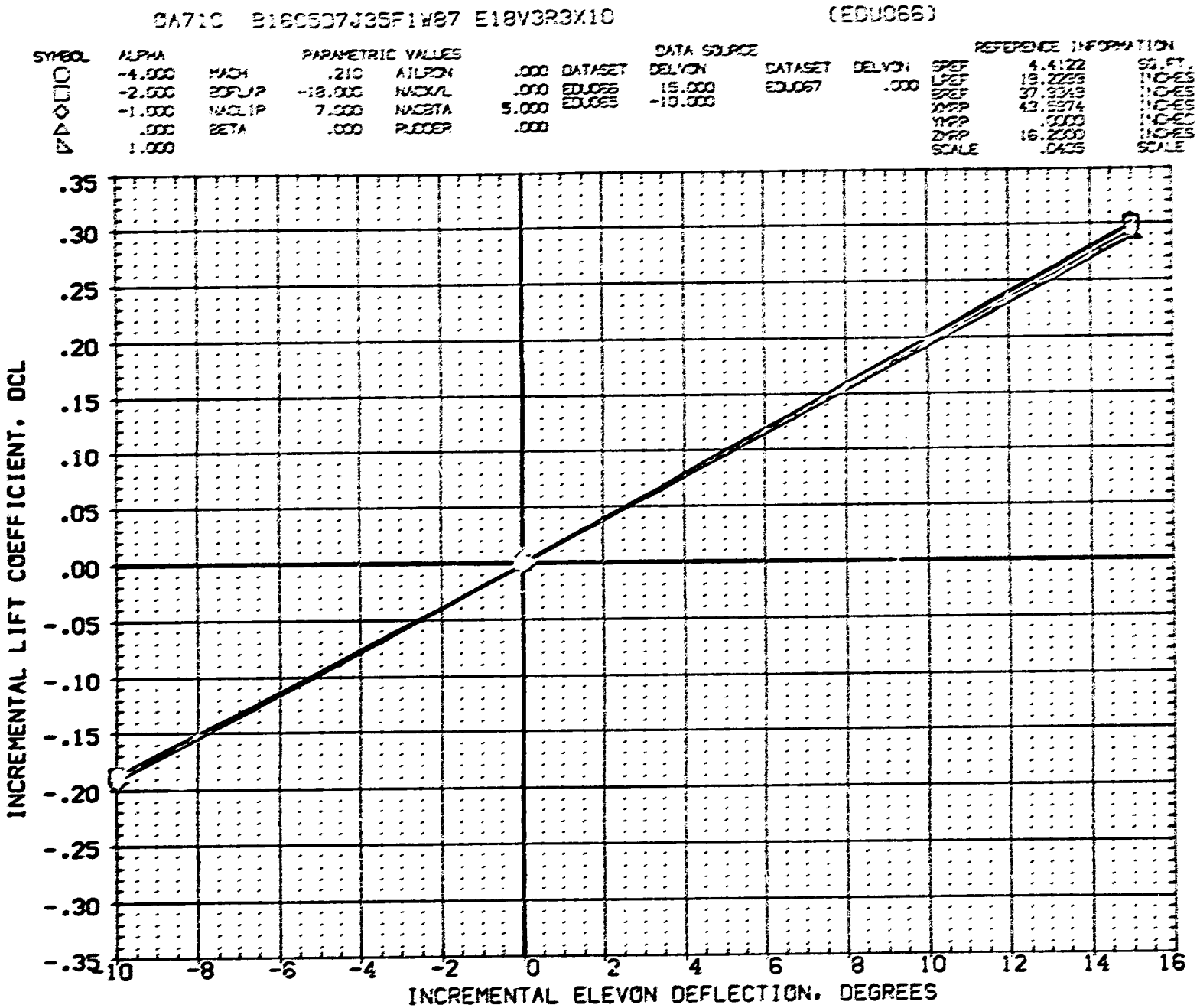


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU066)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	2.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	4.000	BOFLAP	-18.000	NACX/L	.000	EDU056	15.000	EDU067	.000	LREF	19.2299	INCHES
◇	6.000	NACLIP	7.000	NACBTA	5.000	EDU065	-10.000			BREF	37.9349	INCHES
△	8.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	10.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

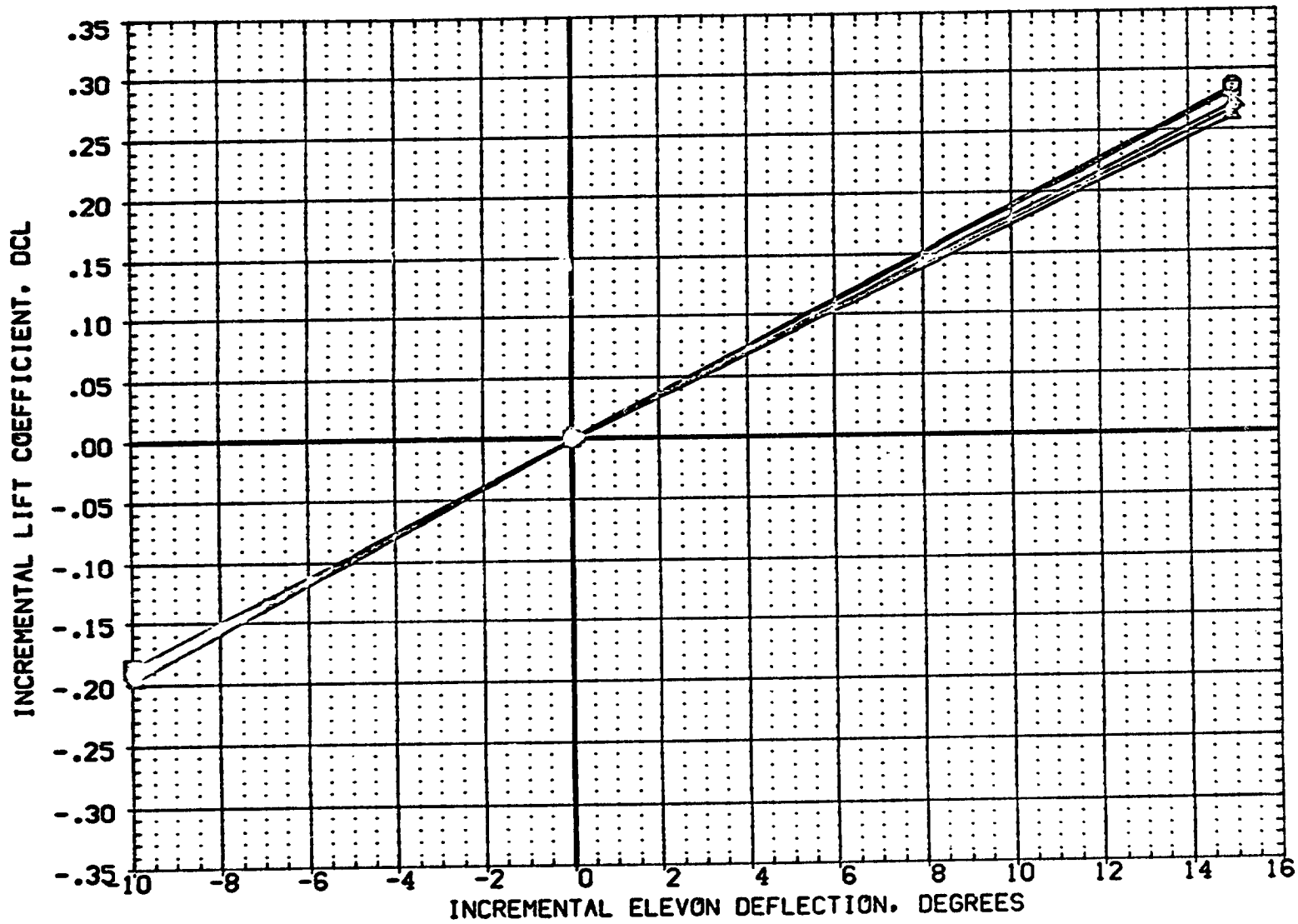


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950.

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU066)

SYMBOL	ALPHA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRCN	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	EDFLAP	-18.000	NACX/L	.000	EDU055	15.000	EDU067	.000	LREF	19.2299	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU055	-10.000			BREF	37.9349	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

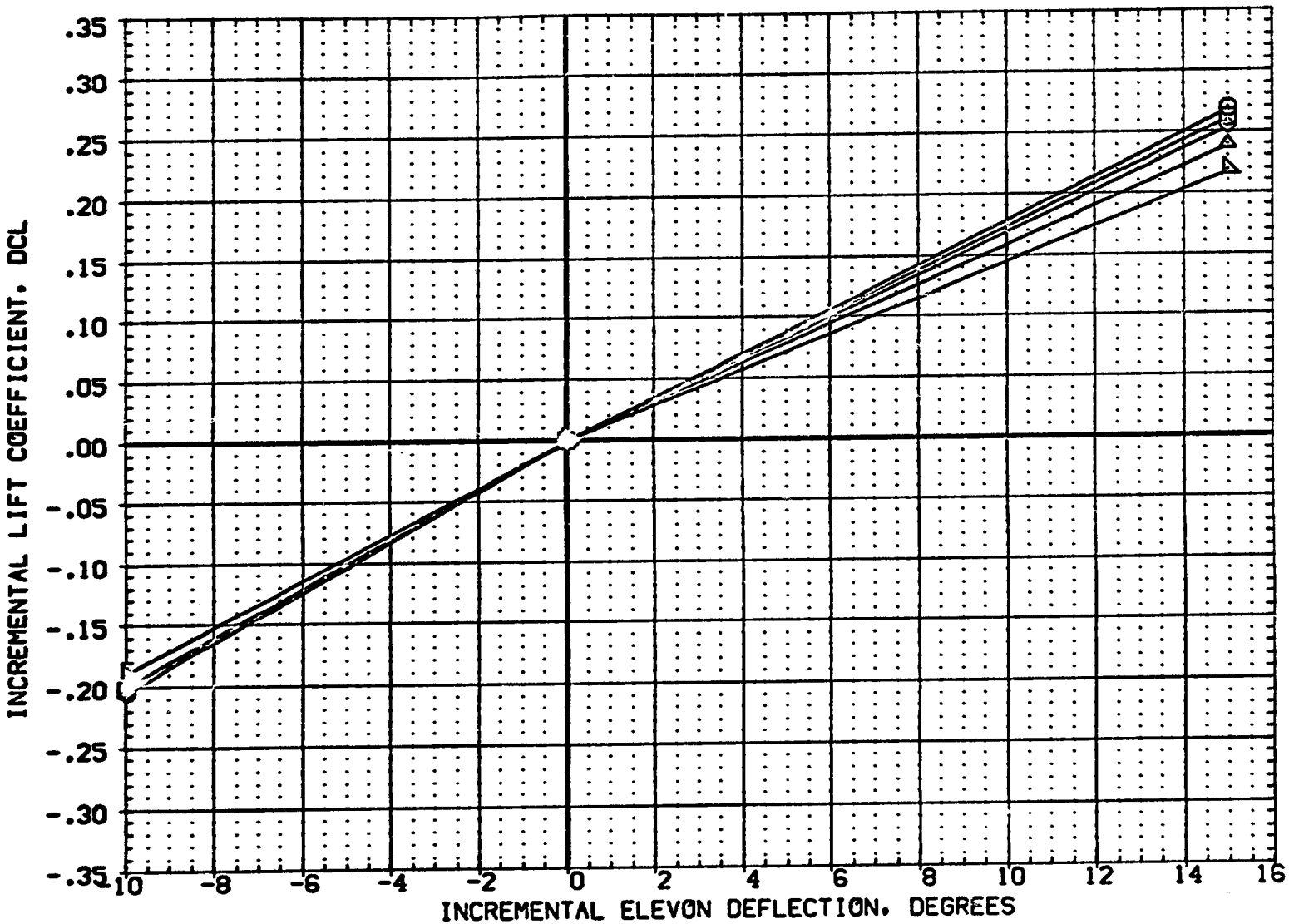


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

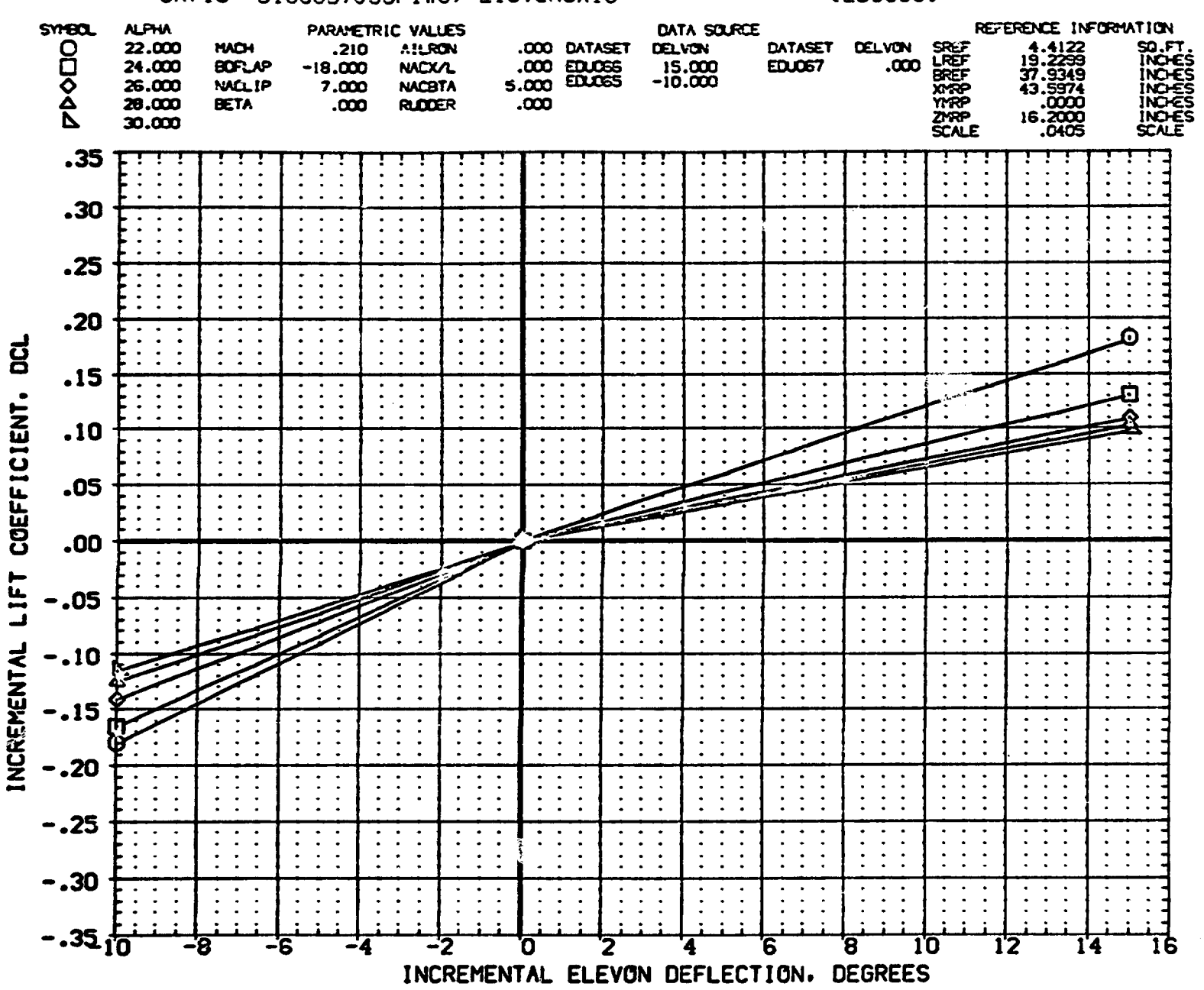


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XQ = 950

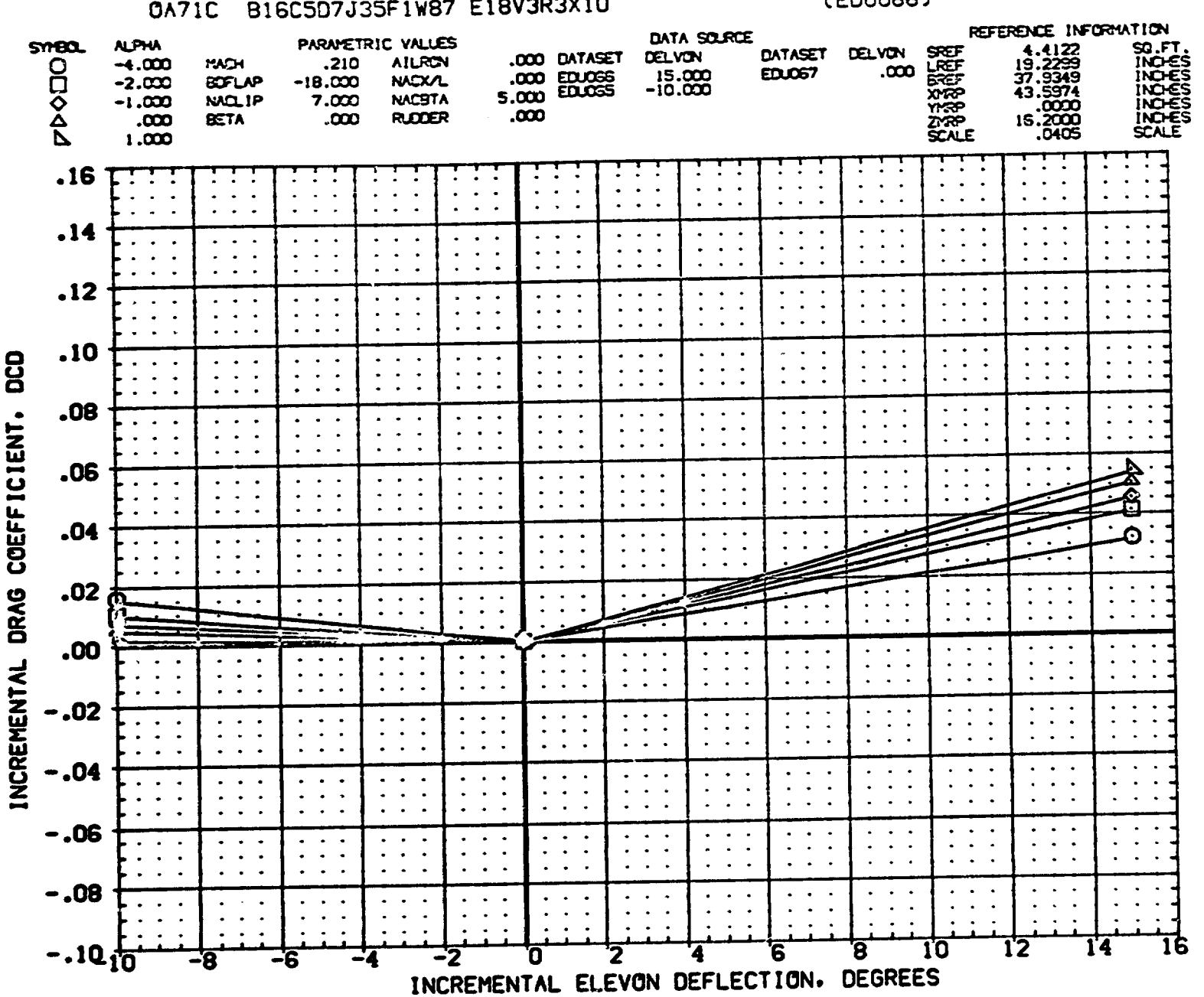


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

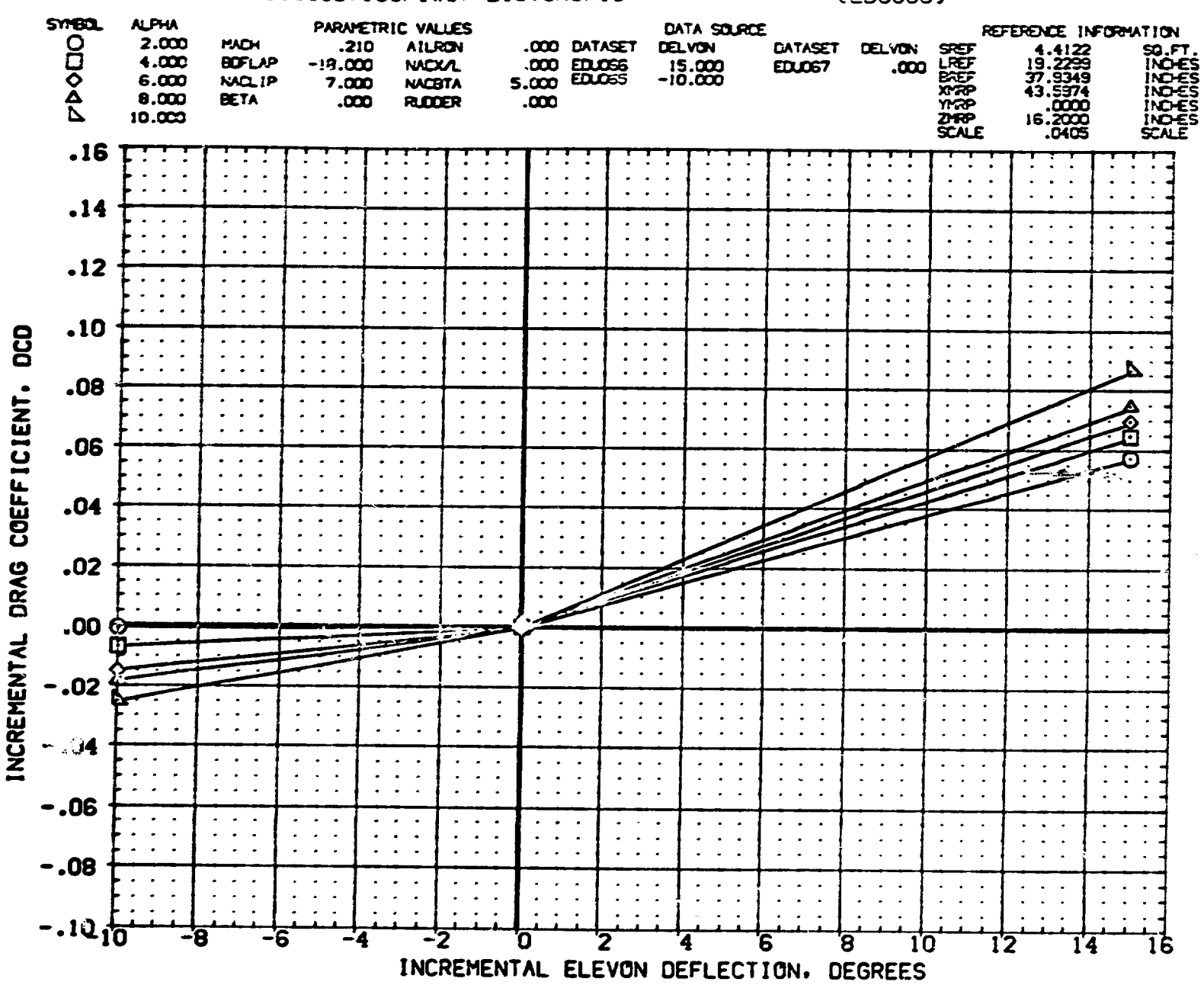


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

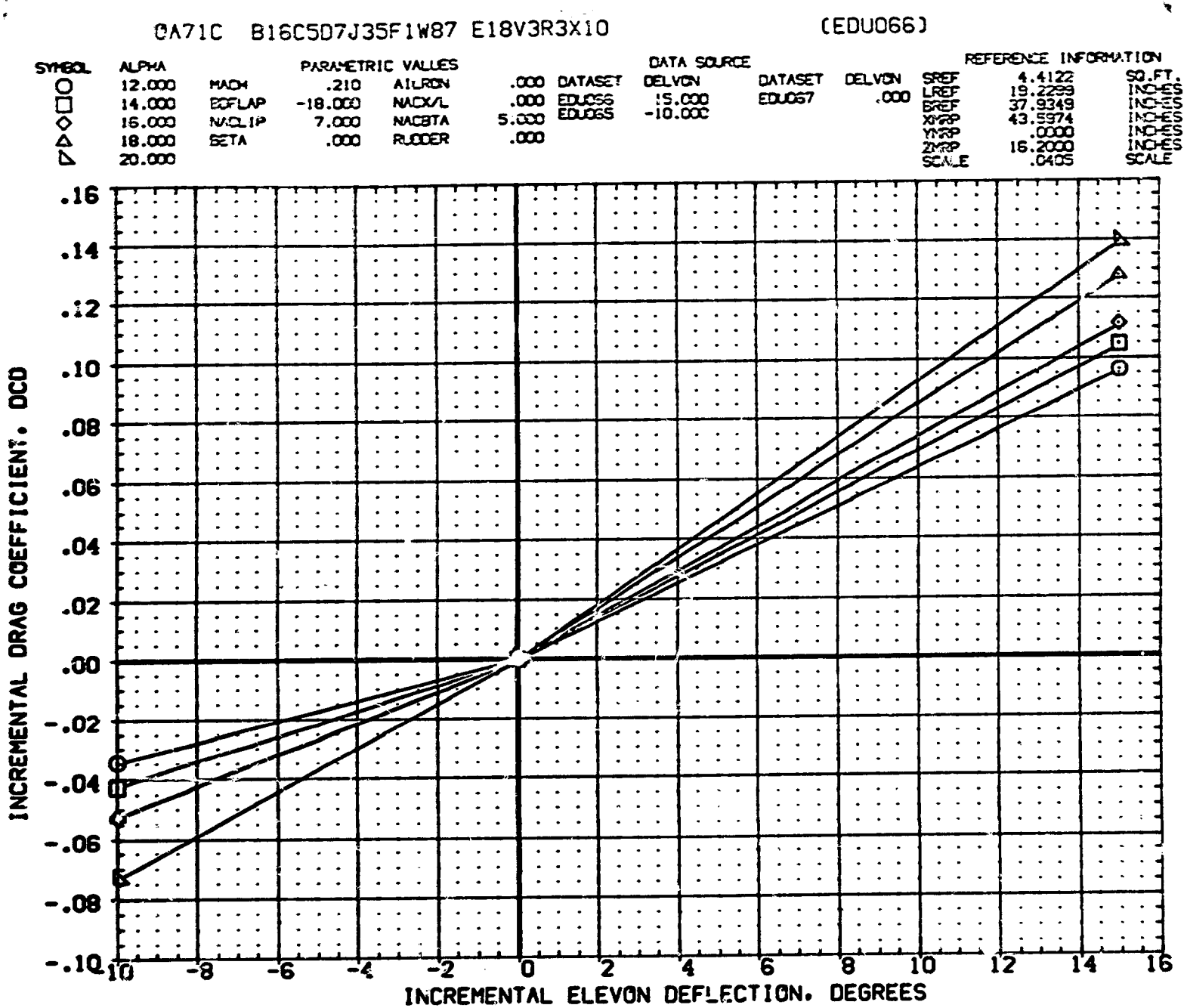


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

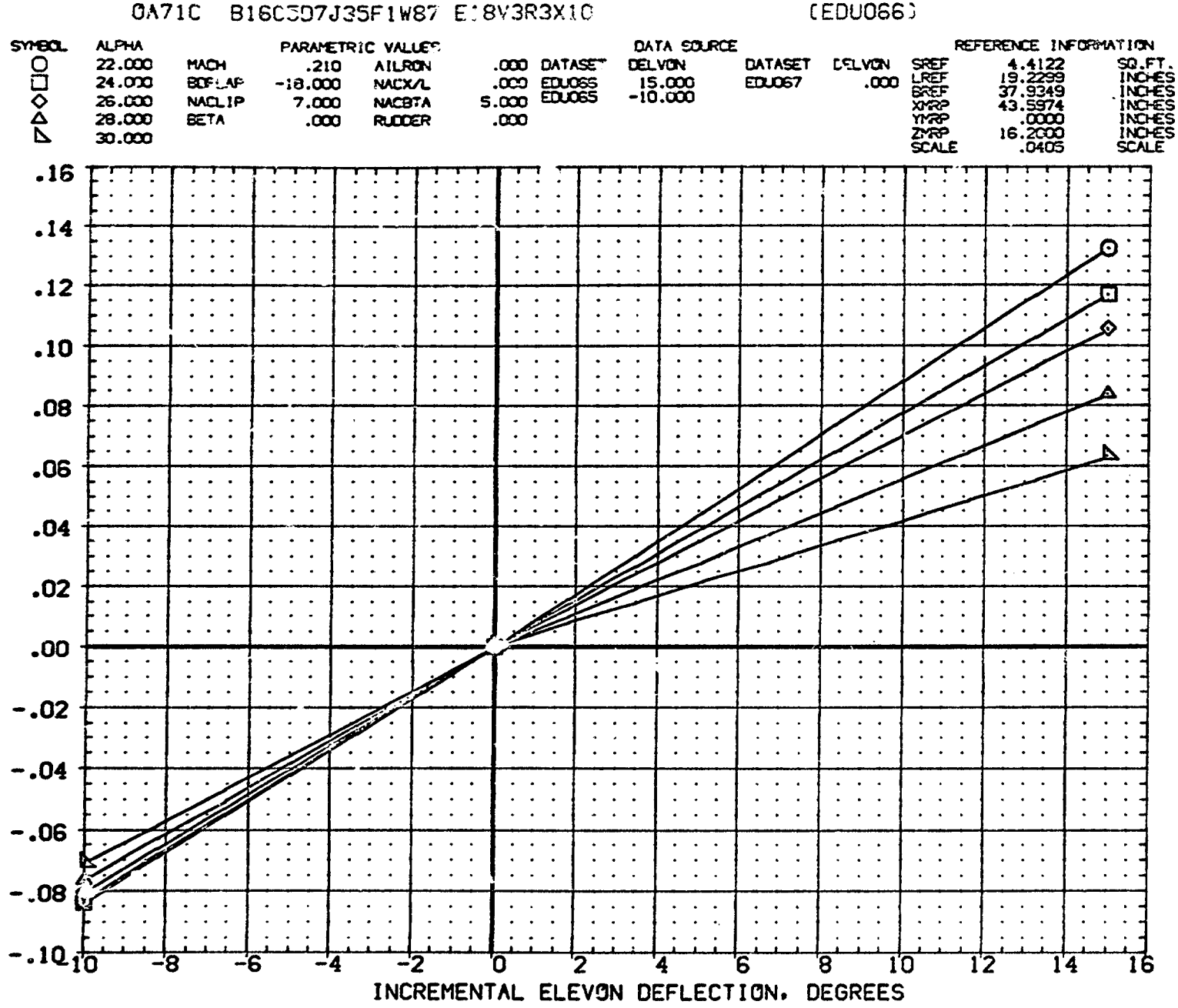


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU06G)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BDFLAP	-18.000	NACX/L	.000	EDU06G	15.000	EDU067	.000	LREF	19.2299	INCHES
▷	-1.000	NACLIP	7.000	NACBTA	5.000	EDU06S	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

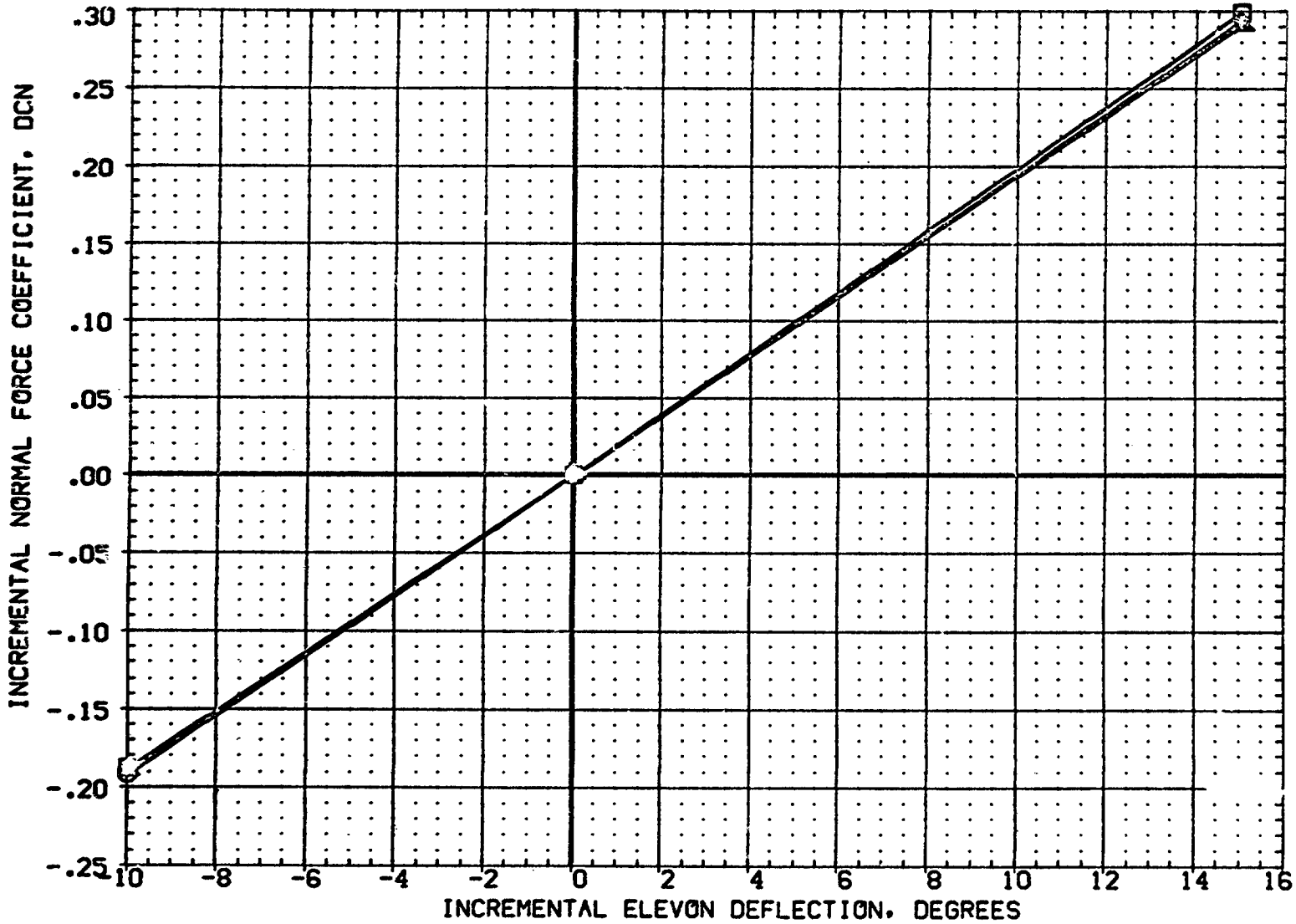


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

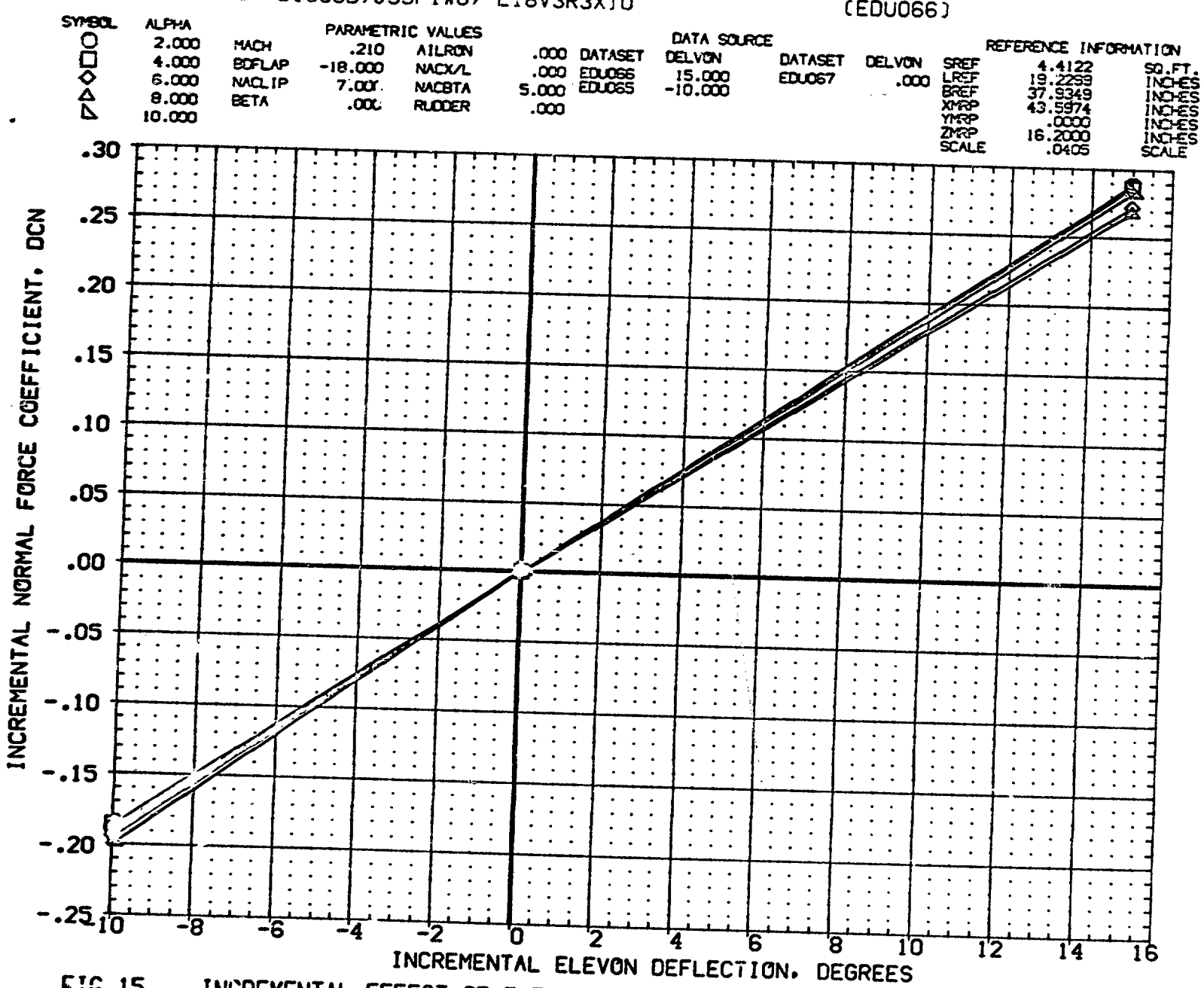


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU066)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	BDFLAP	-18.000	NACX/L	.000	EDU06S	15.000	EDU067	.000	LREF	19.2239	INCHES
◇	16.000	NACLIP	7.000	NACBTA	5.000	EDU06S	-10.000			BREF	37.9349	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

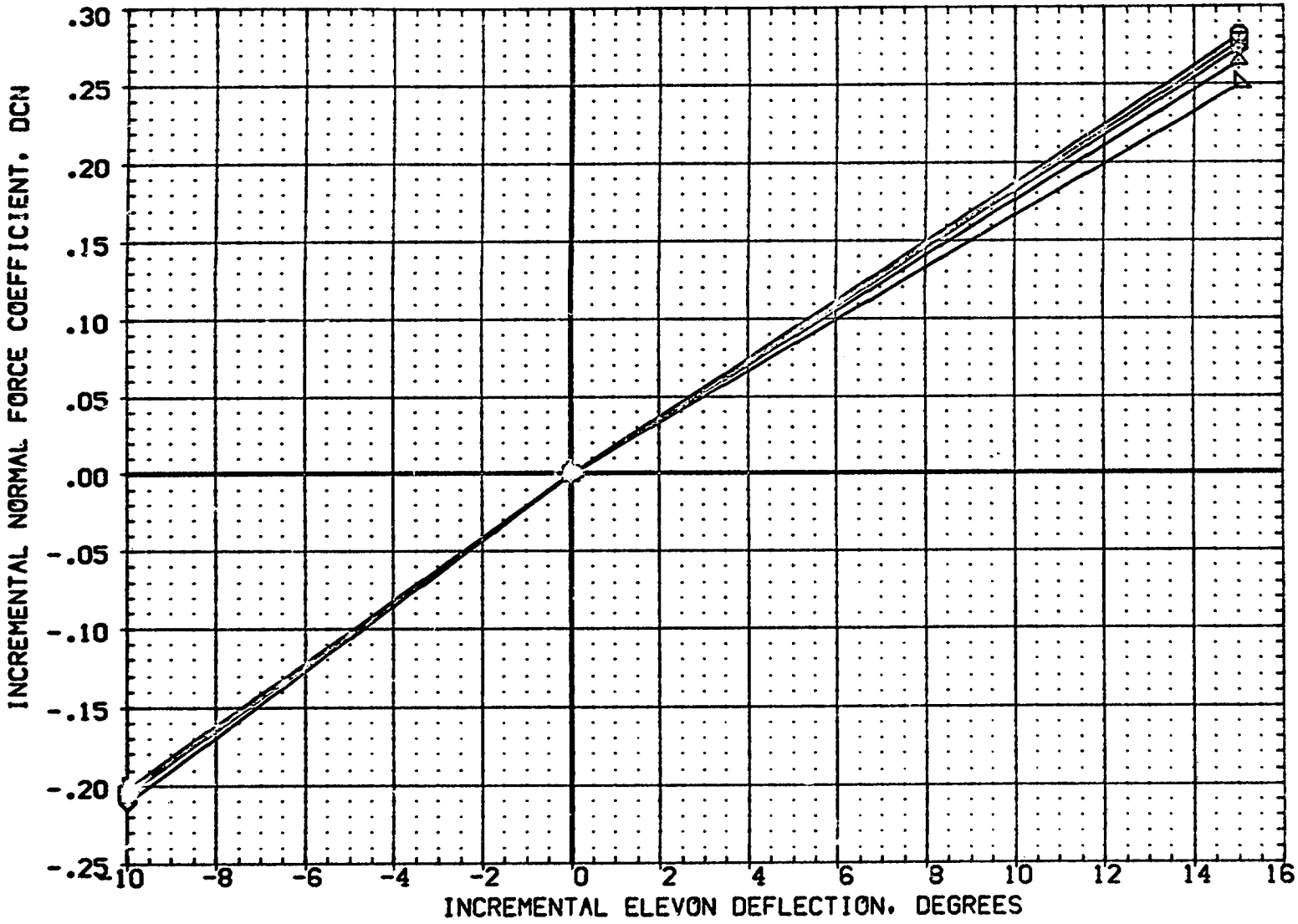


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU066)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	BOFLAP	-18.000	NACX/L	.000	EDU066	15.000	EDU067	.000	LREF	19.2229	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU035	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▷	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

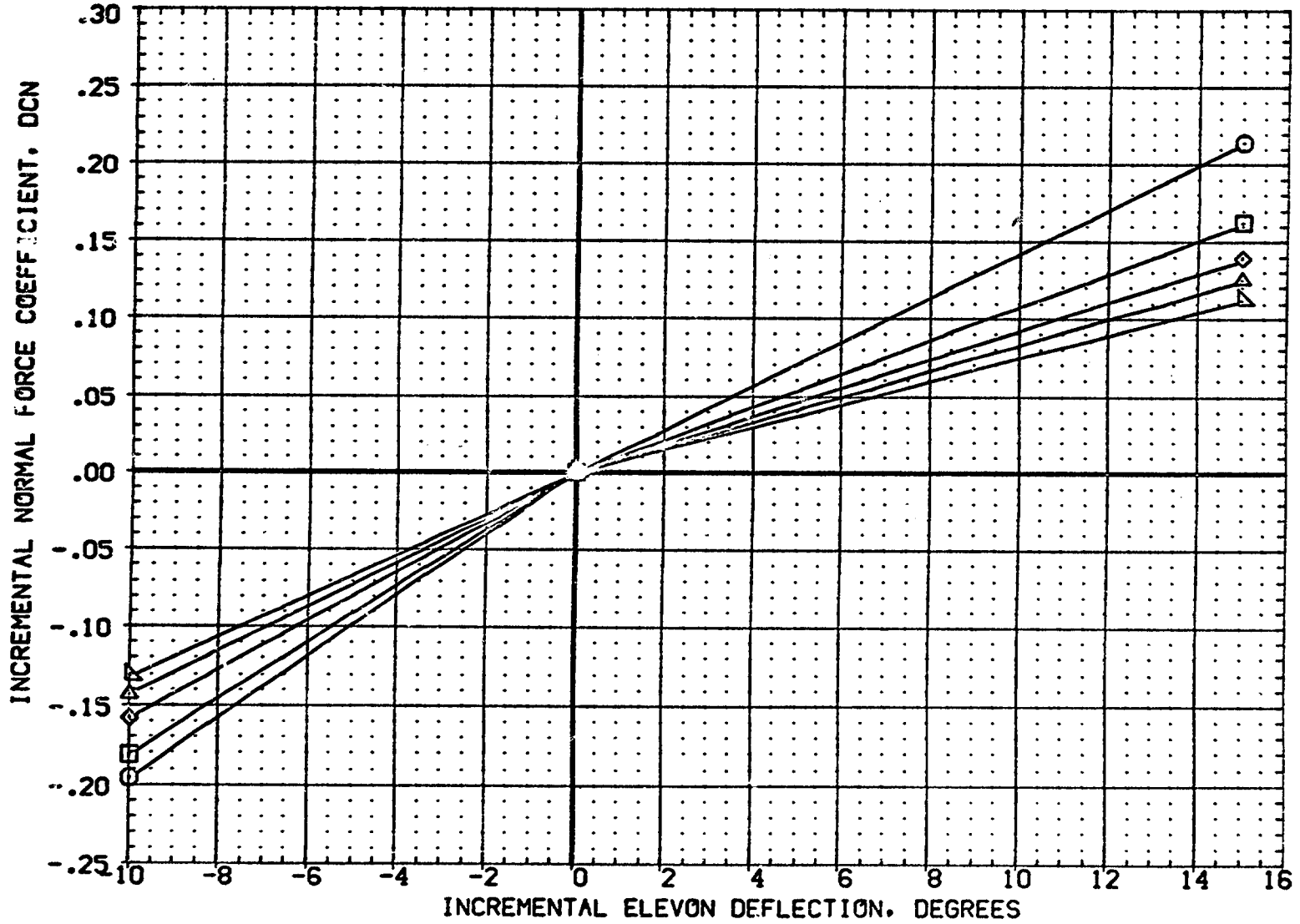


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU066)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	-4.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	-2.000	BOFLAP	-18.000	NACX/L	.000	EDU055	15.000	EDU067	.000	LREF	19.2299	INCHES
◇	-1.000	NACLIP	7.000	NACBTA	5.000	EDU065	-10.000			BREF	37.9349	INCHES
△	.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	1.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

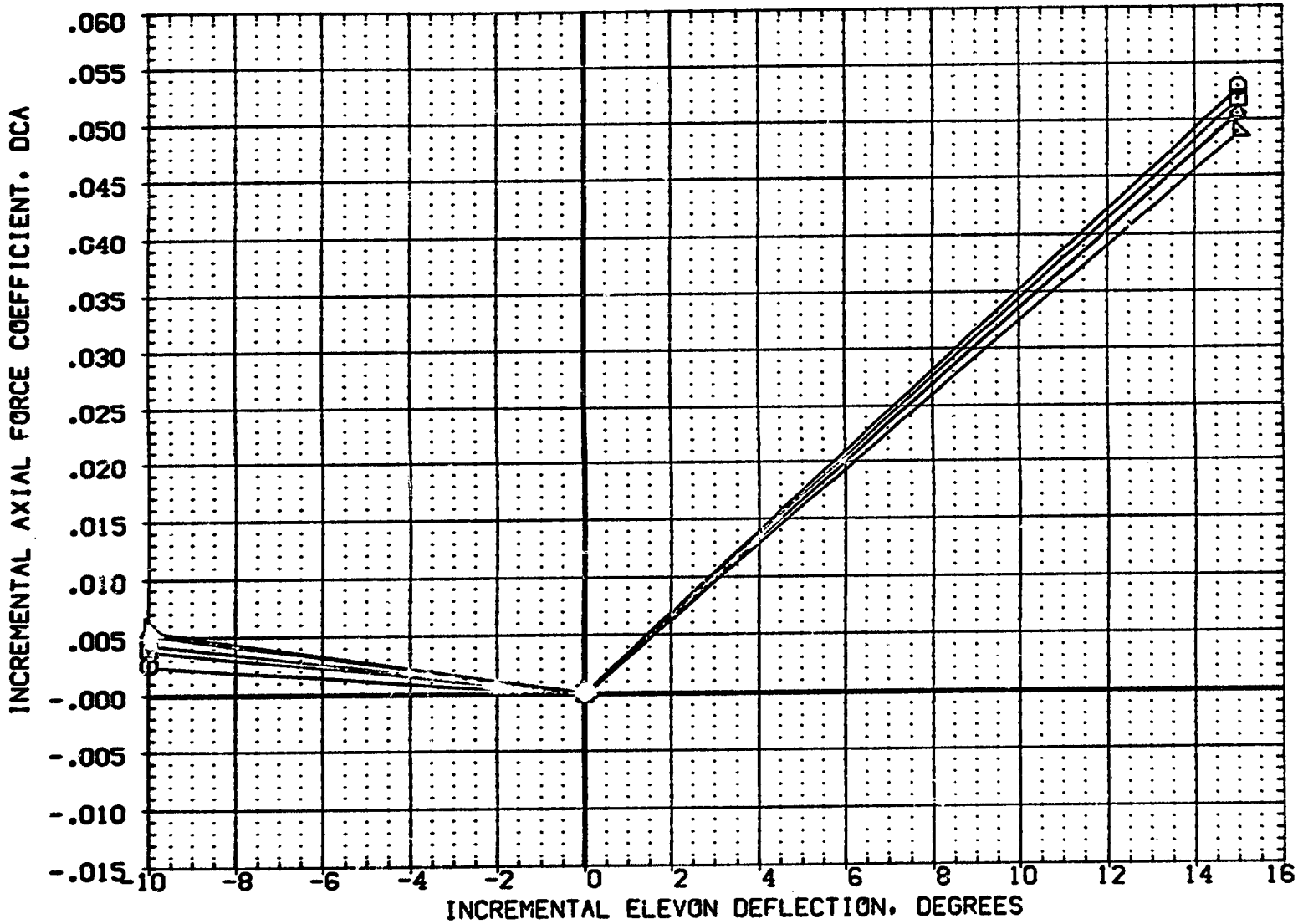


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU066)

SYMBOL	ALPHA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	2.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	4.000	BOFLAP	-18.000	NACX/L	.000	EDU066	15.000	EDU067	.000	LREF	19.2299	INCHES
◇	6.000	NACLIP	7.000	NACBTA	5.000	EDU065	-10.000			BREF	37.9349	INCHES
△	8.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	10.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

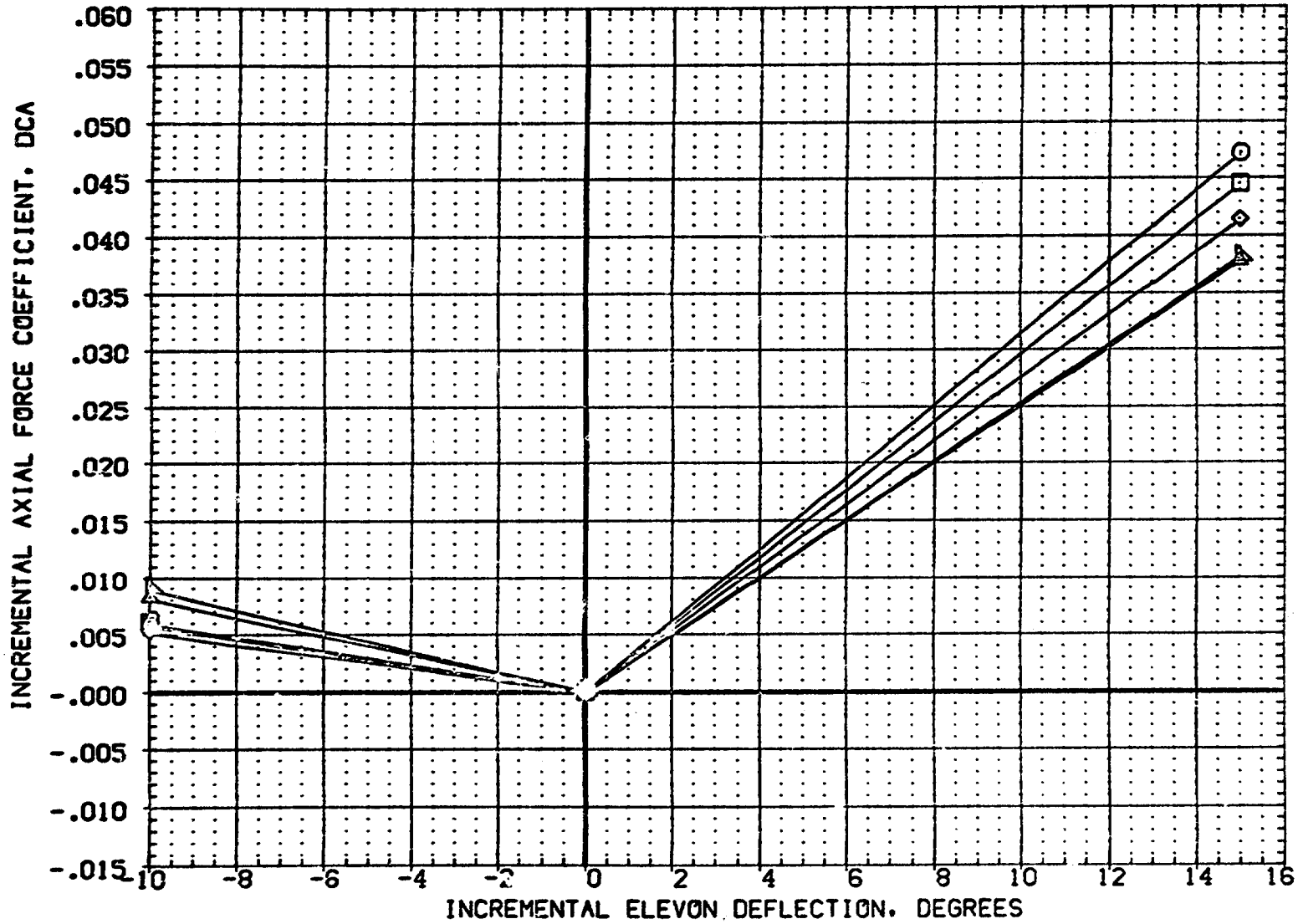


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

0A71C B16C5D7J35F1W87 E18V3R3X10 (EDU066)

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	12.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	14.000	EOFLAP	-18.000	NACX/L	.000	EDUC55	15.000	EDUC57	.000	LREF	19.2293	INCHES
◇	16.000	NACLIP	7.000	NACSTA	5.000	EDUC65	-10.000			BREF	37.9345	INCHES
△	18.000	BETA	.000	RUDDER	.000					XMRP	43.5574	INCHES
	20.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

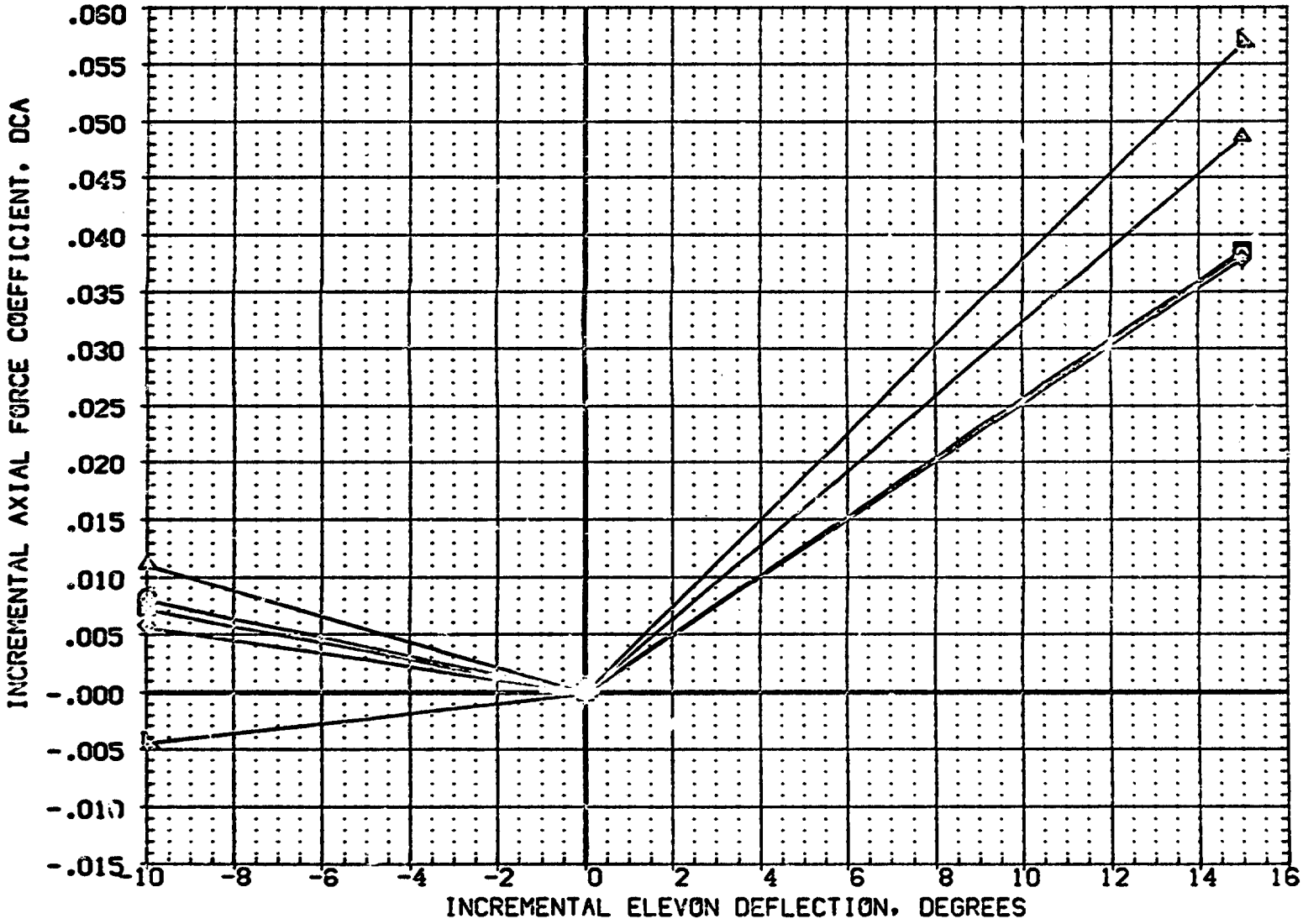


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	BDFLAP	-18.000	NACX/L	.000	EDU066	15.000	EDU067	.000	LREF	19.2299	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU066	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

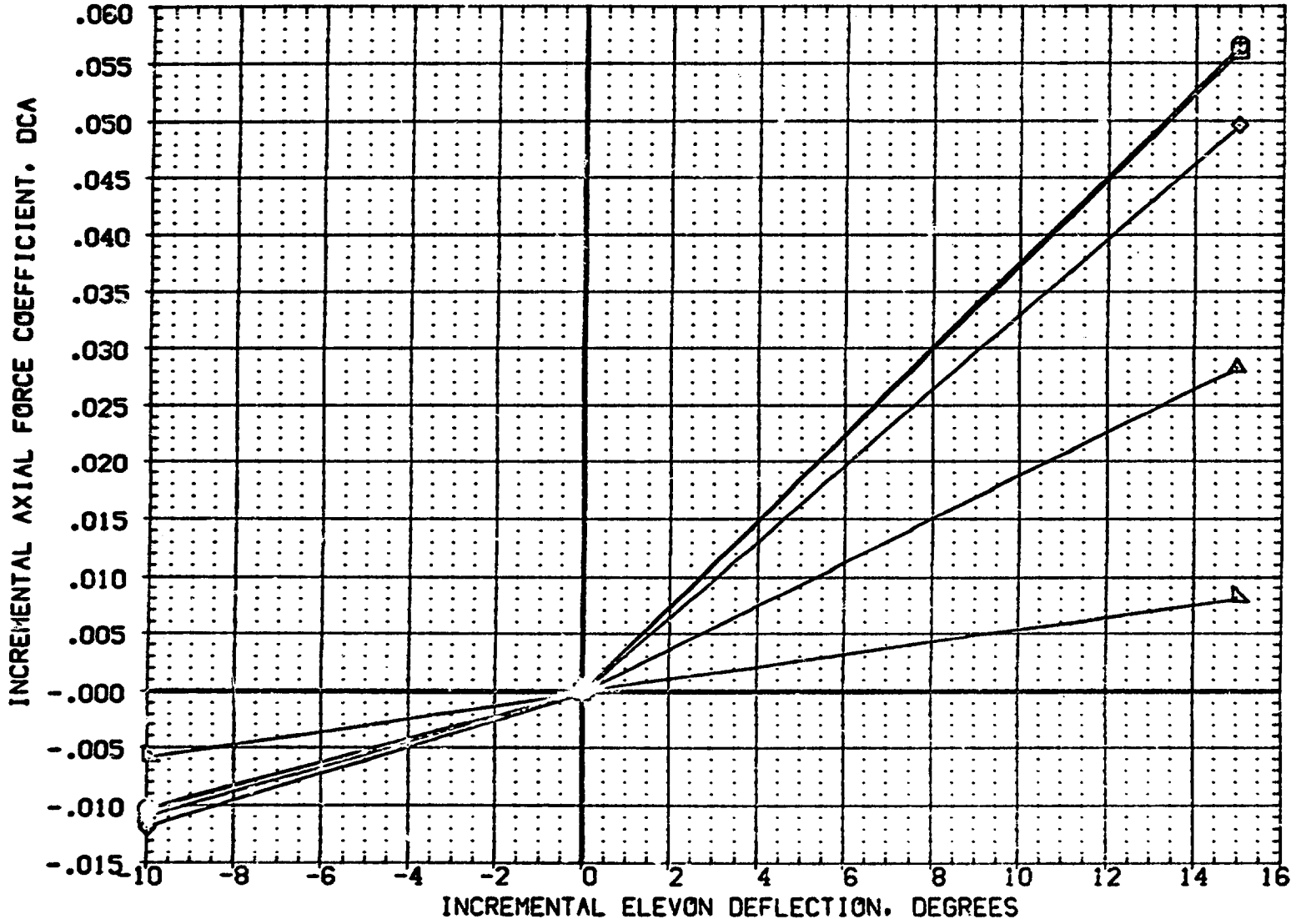


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

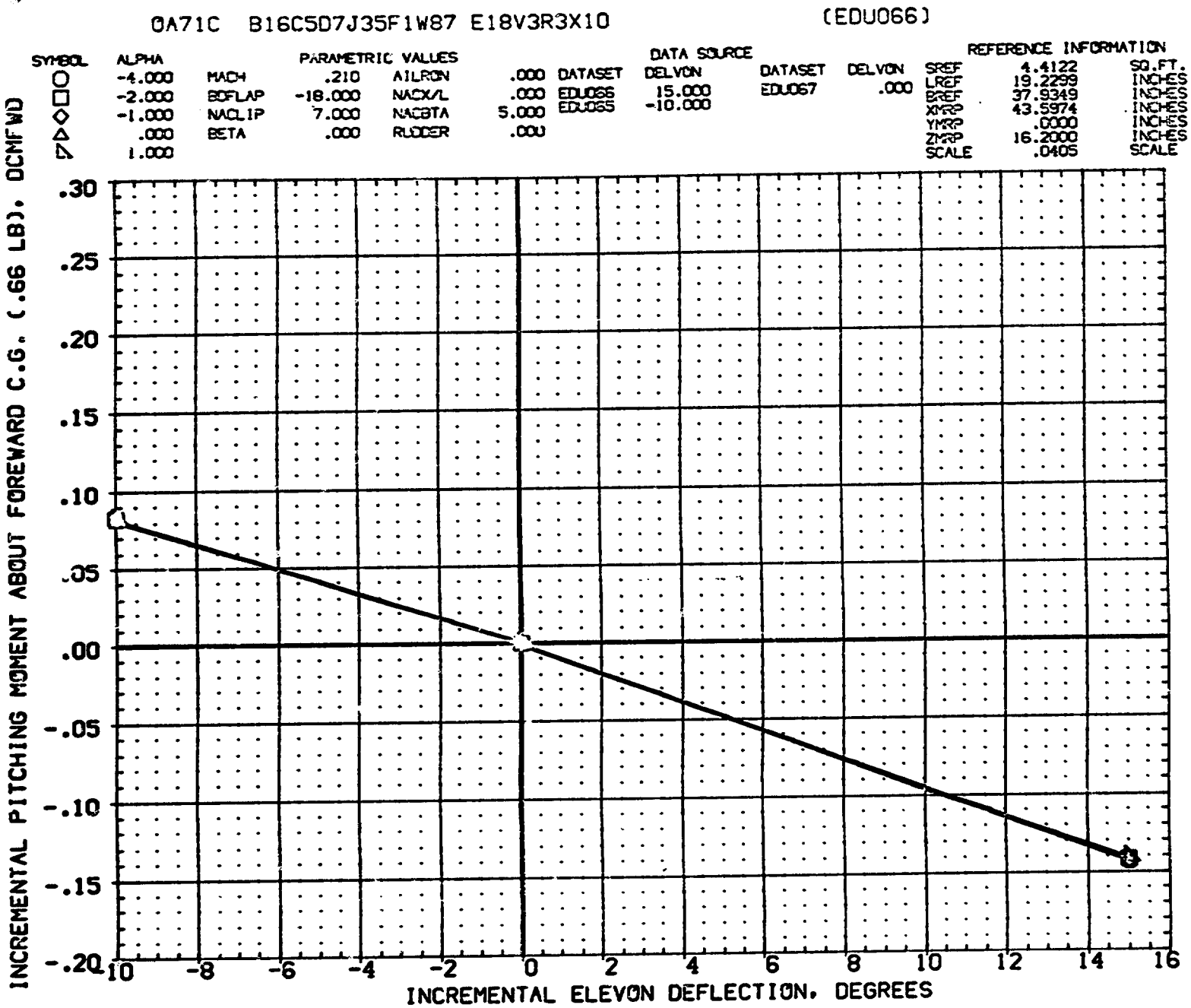


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES-2-OVERWING XO = 950

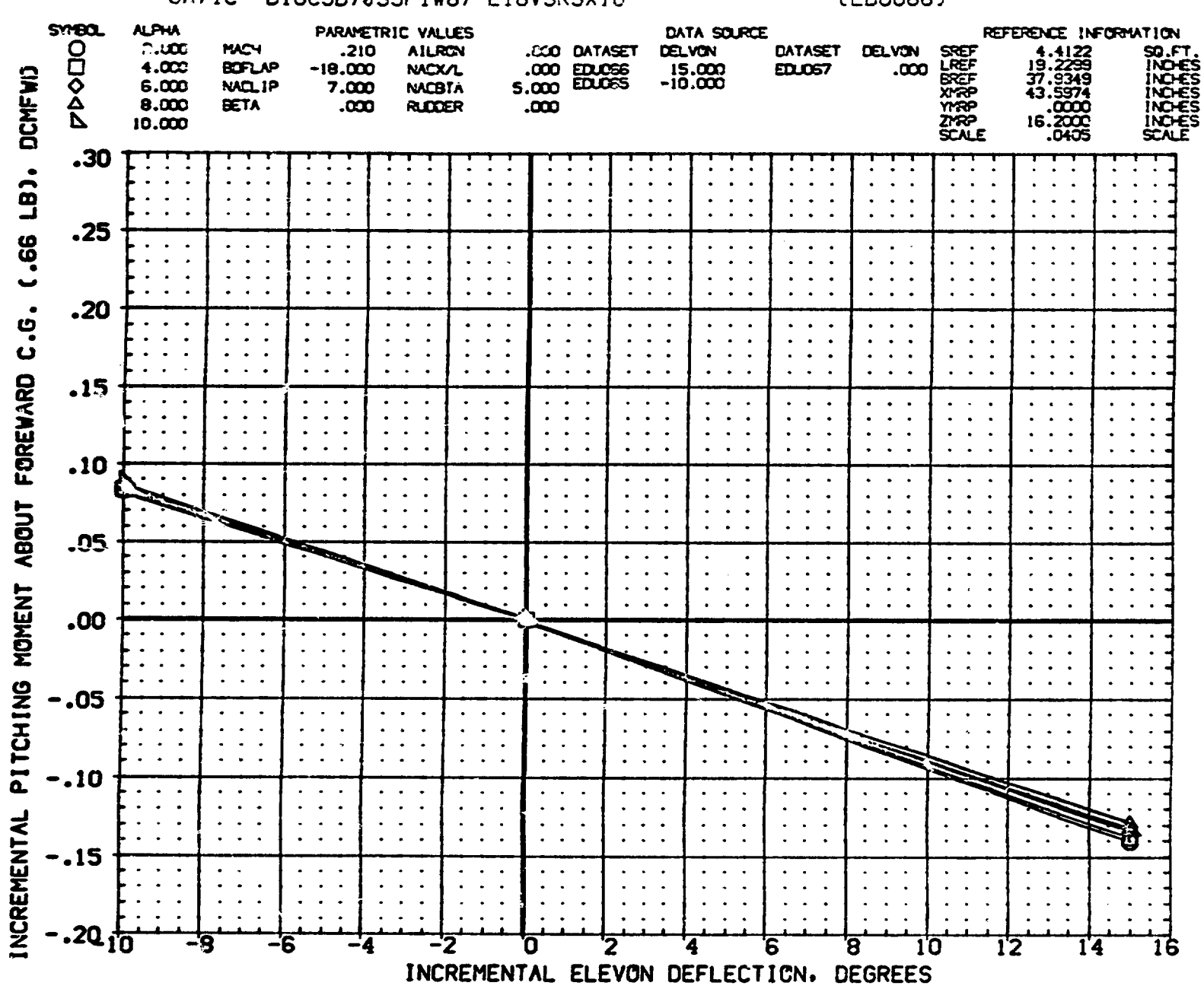


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

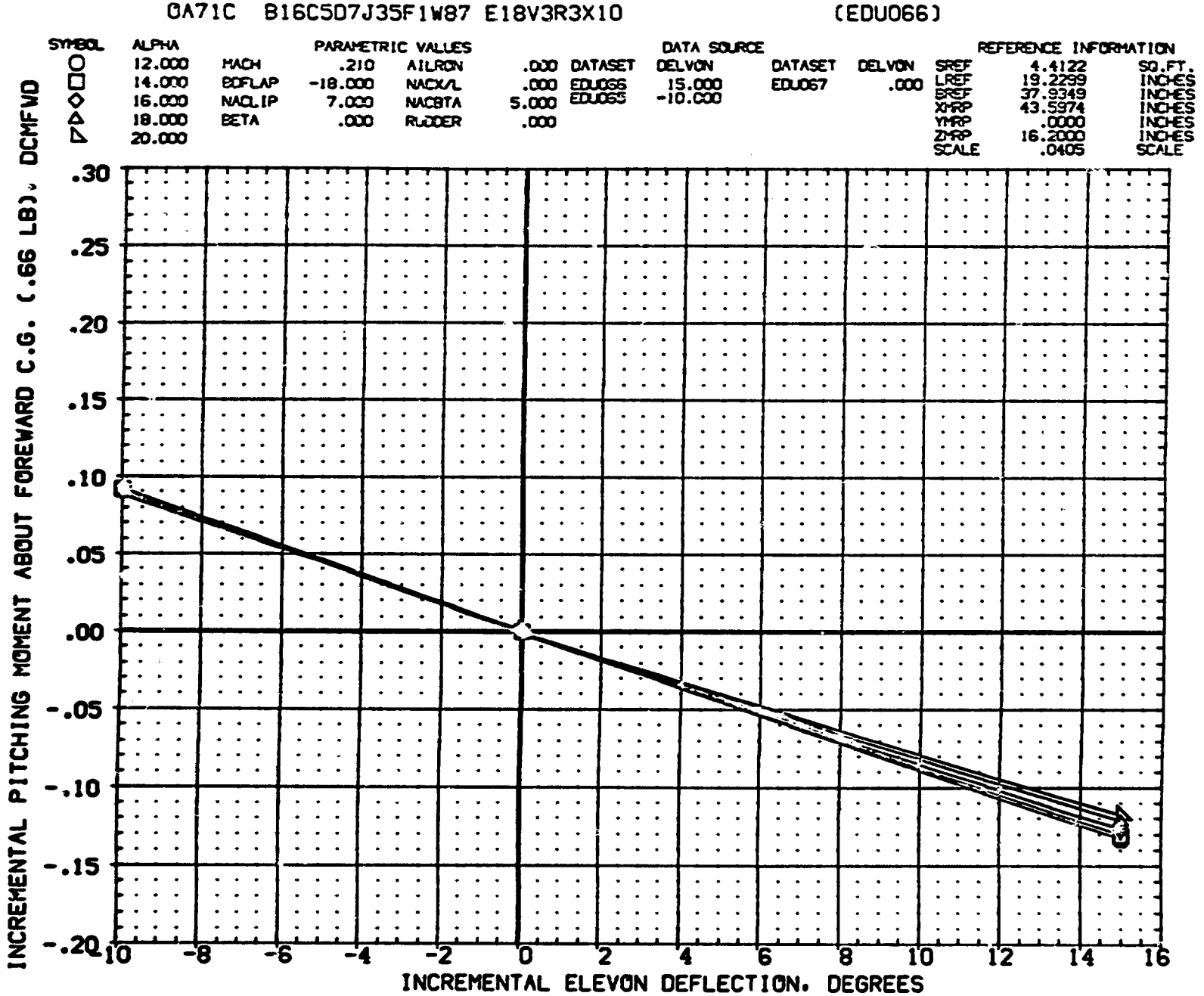


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

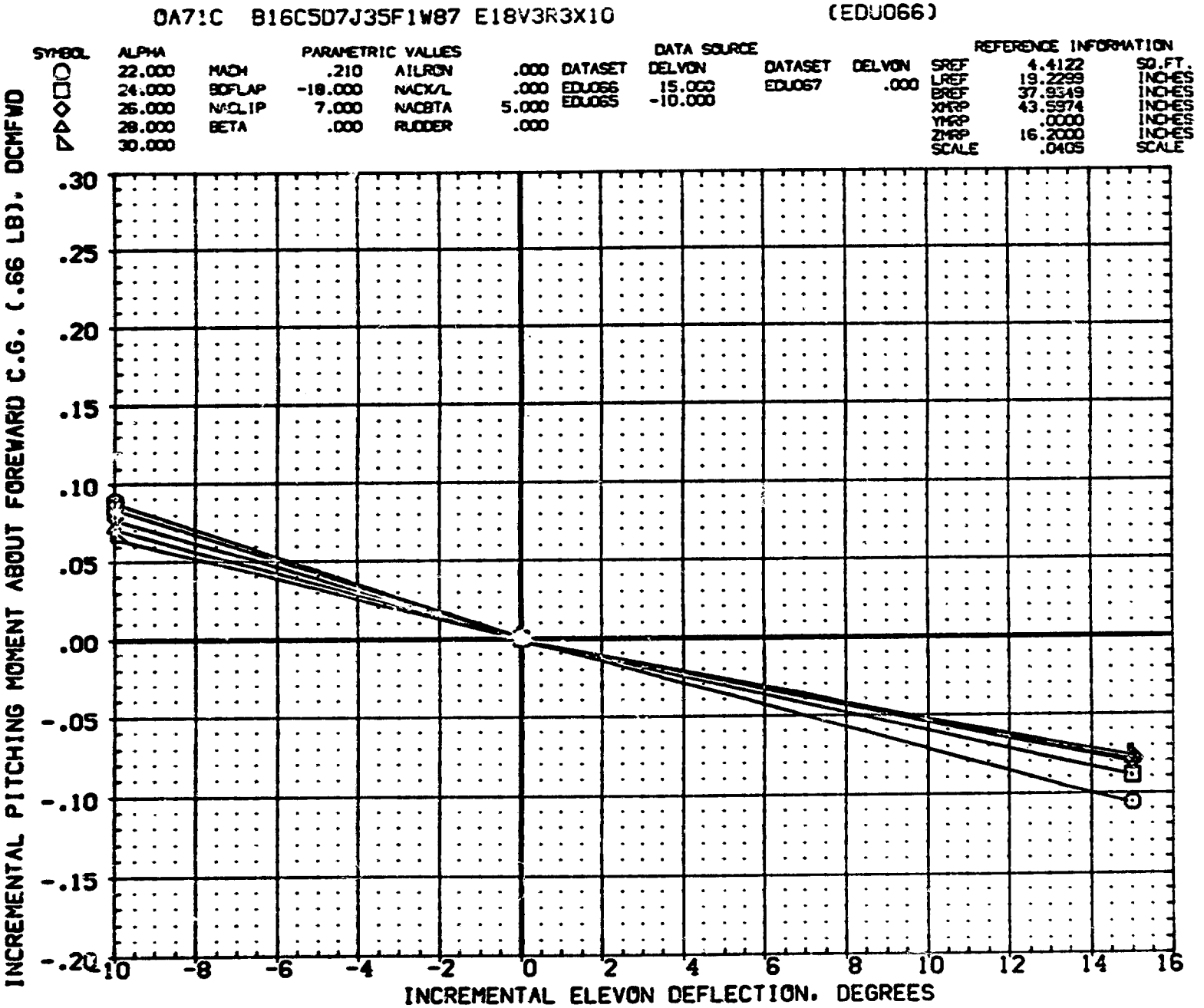


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

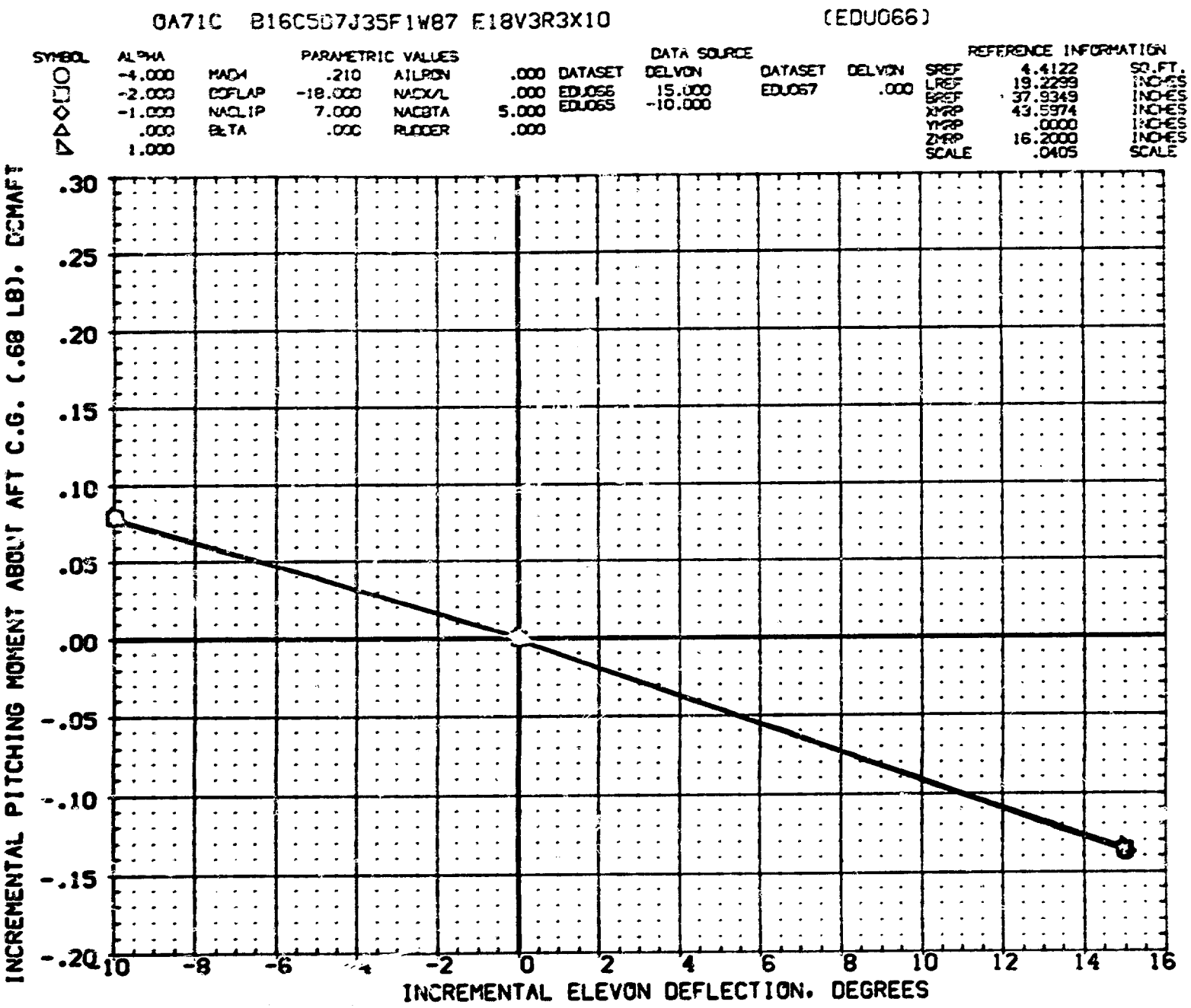


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	2.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	4.000	EDFLAP	-18.000	NACX/L	.000	EDU066	15.000	EDU067	.000	LREF	19.2298	INCHES
◇	6.000	NACLIP	7.000	NACBTA	5.000	EDU065	-10.000			BREF	37.9349	INCHES
△	8.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	10.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

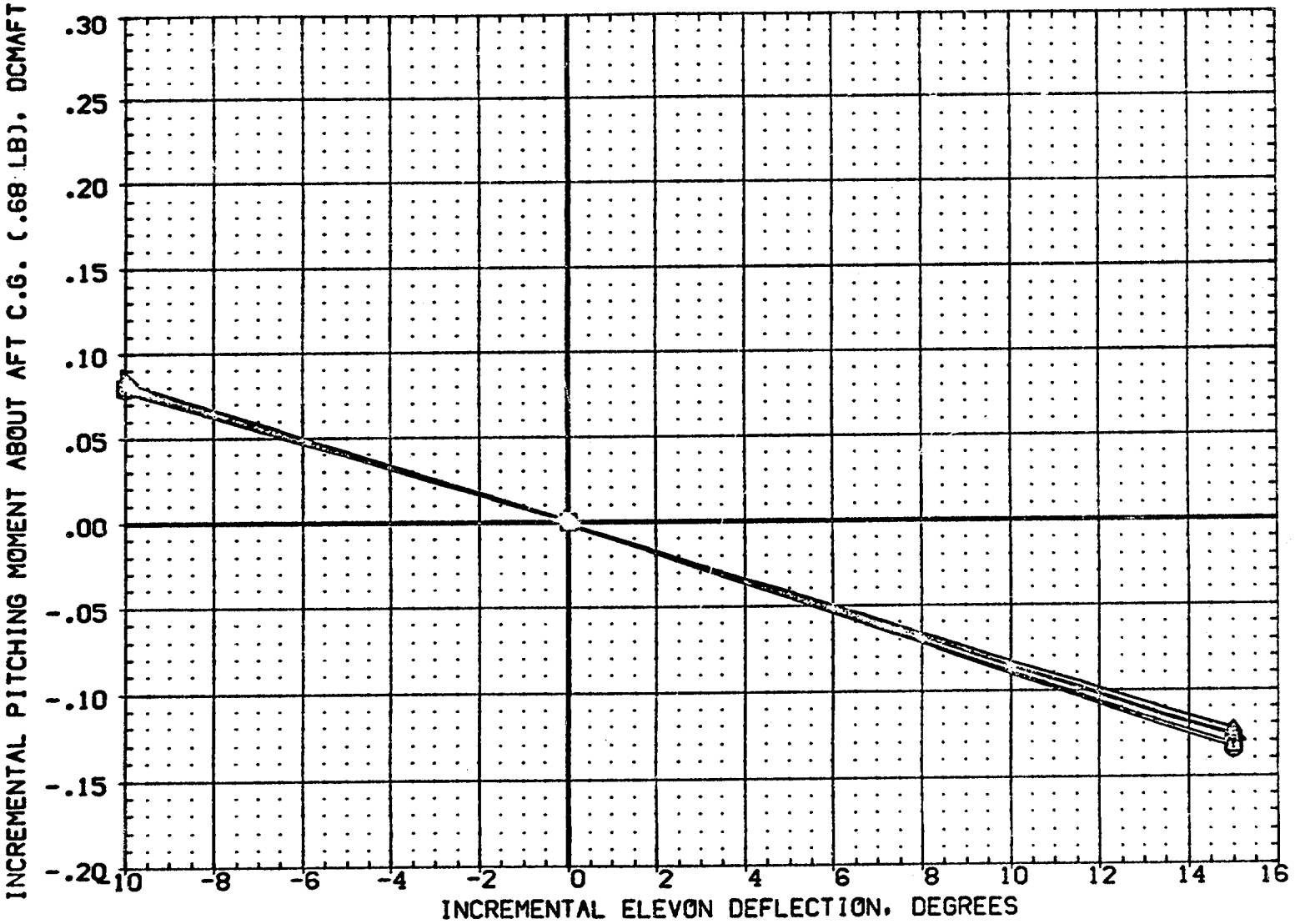


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

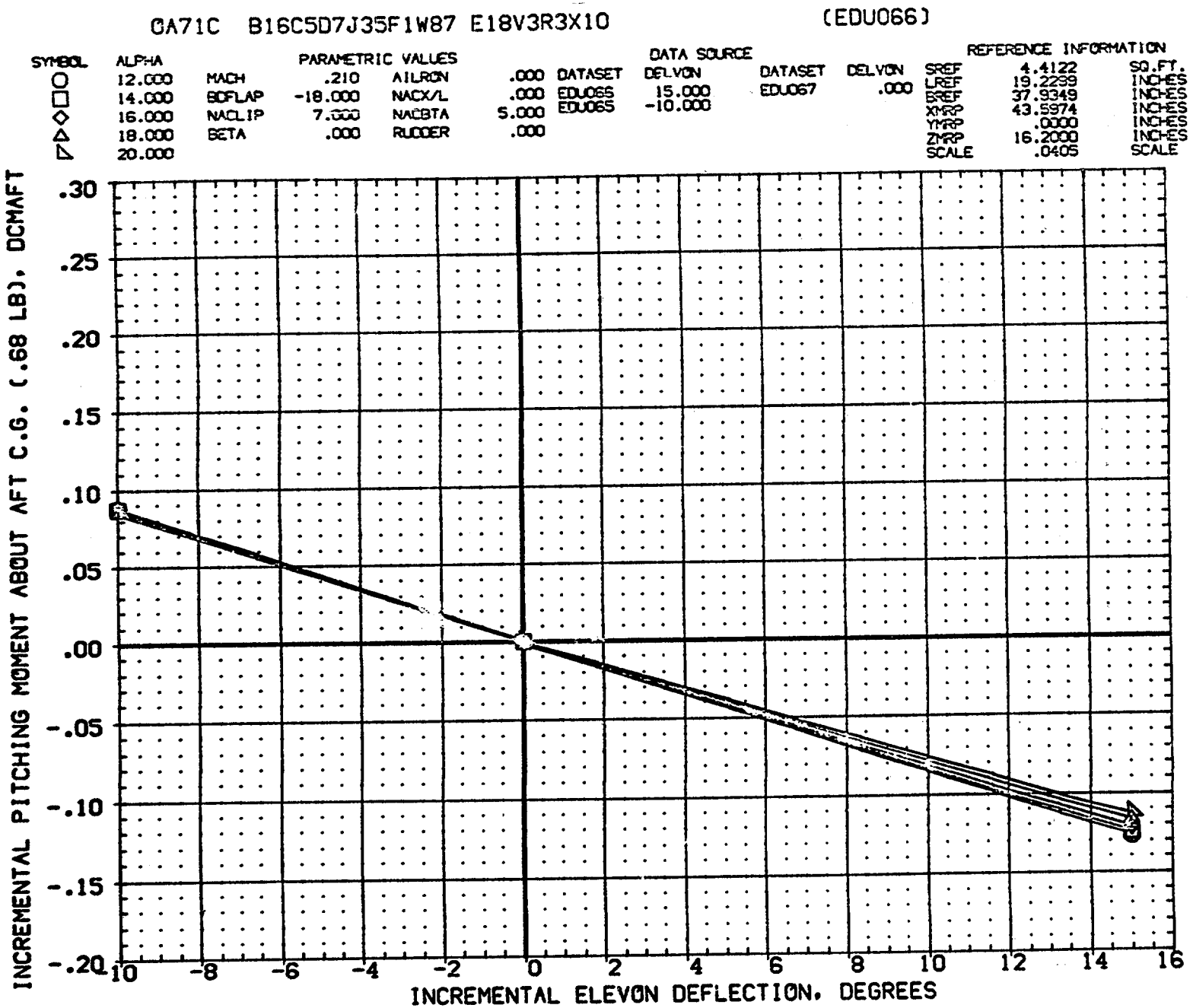


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	22.000	MACH	.210	AILRON	.000	DATASET	DELVON	DATASET	DELVON	SREF	4.4122	SQ.FT.
□	24.000	BOFLAP	-18.000	NACX/L	.000	EDU066	15.000	EDU067	.000	LREF	19.2299	INCHES
◇	26.000	NACLIP	7.000	NACBTA	5.000	EDU065	-10.000			BREF	37.9349	INCHES
△	28.000	BETA	.000	RUDDER	.000					XMRP	43.5974	INCHES
▽	30.000									YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

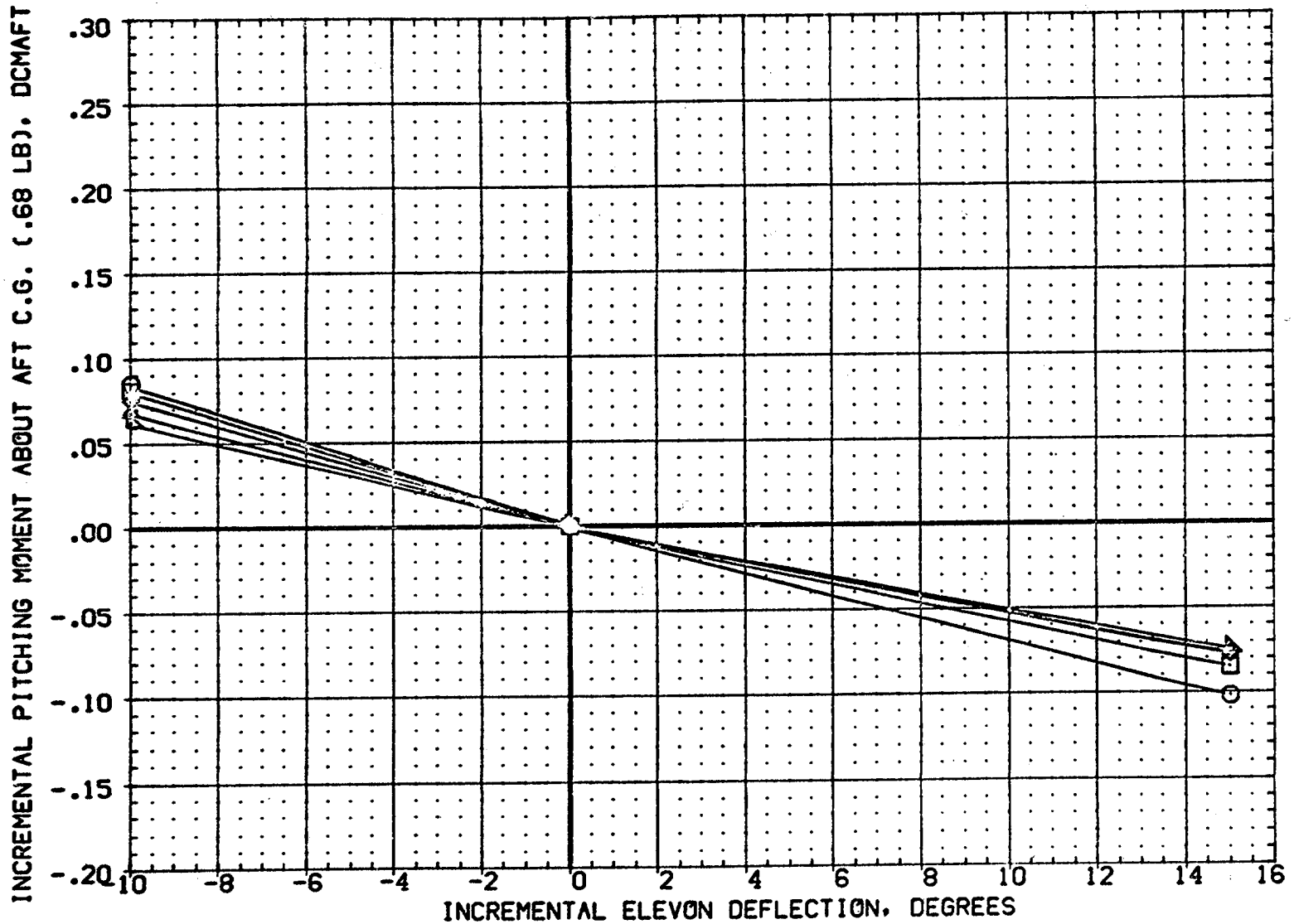


FIG 15 INCREMENTAL EFFECT OF ELEVONS -CLUSTERED NACELLES 2 OVERWING XO = 950

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(RØØØØ5)	○	GA7IC B16C5D7 F1W87 E18V3R3X9
(RØØØØ7)	□	GA7IC B16C5D7 F1W87 E18V3R3X9
(RØØØ10)	◇	GA7IC B16C5D7 F1W87 E18V3R3X9
(RØØØØ1)	△	GA7IC B16C5D7 F1W87 E18V3R3X9

AILRON	ELEVON	BOFLAP	BETA
5.000	.000	-18.000	.000
10.000	.000	-18.000	.000
15.000	.000	-18.000	.000
.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

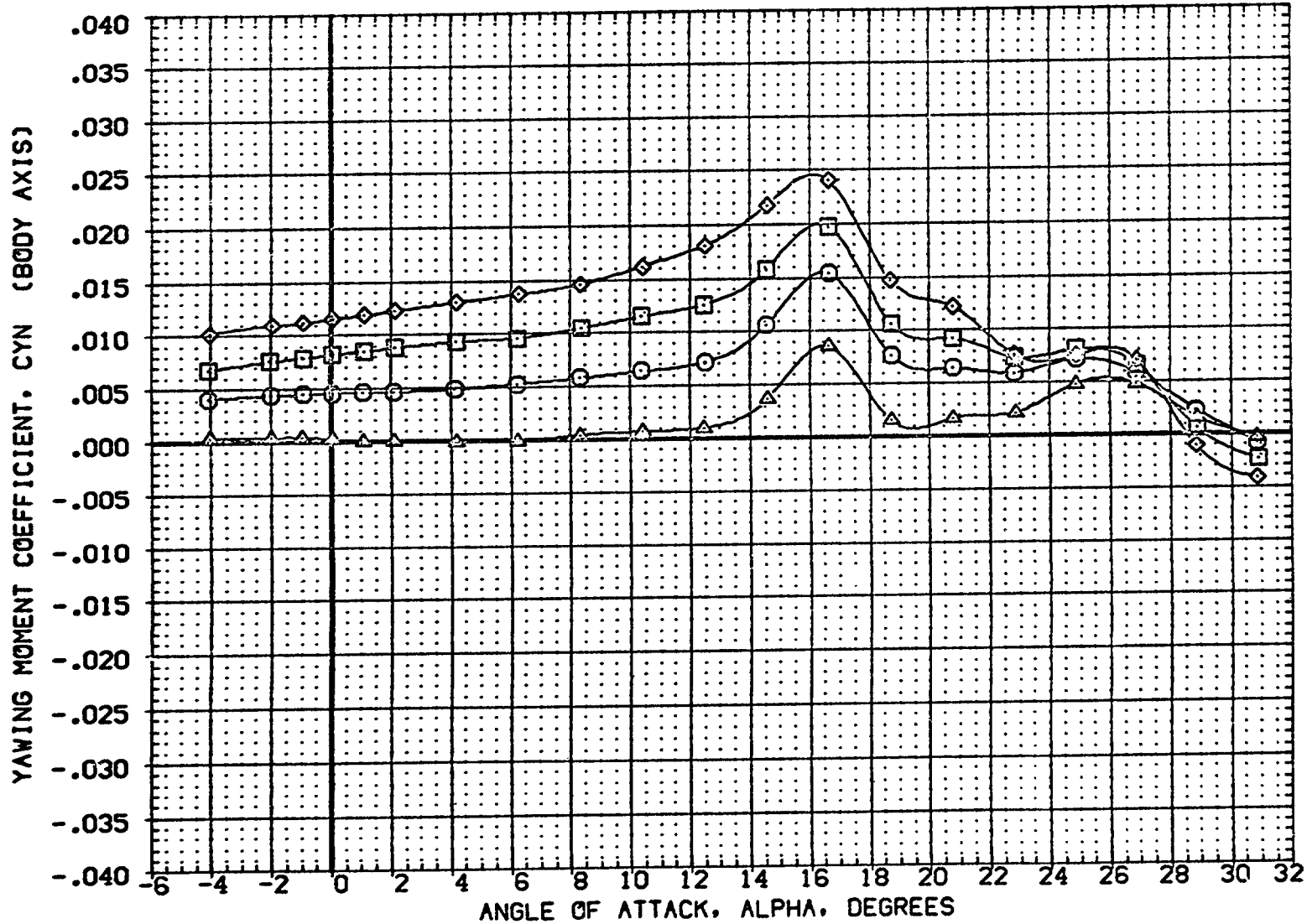


FIG 16 AILERONS DEFLECTED - NØ NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(RDU005)	○	OA71C B16C507 F1W87 E18V3R3X9
(RDU007)	□	OA71C B16C507 F1W87 E18V3R3X9
(RDU010)	◇	OA71C B16C507 F1W87 E18V3R3X9
(RDU001)	△	OA71C B16C507 F1W87 E18V3R3X9

AILRON	ELEVON	BOFLAP	BETA
5.000	.000	-18.000	.000
10.000	.000	-18.000	.000
15.000	.000	-18.000	.000
.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2239	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

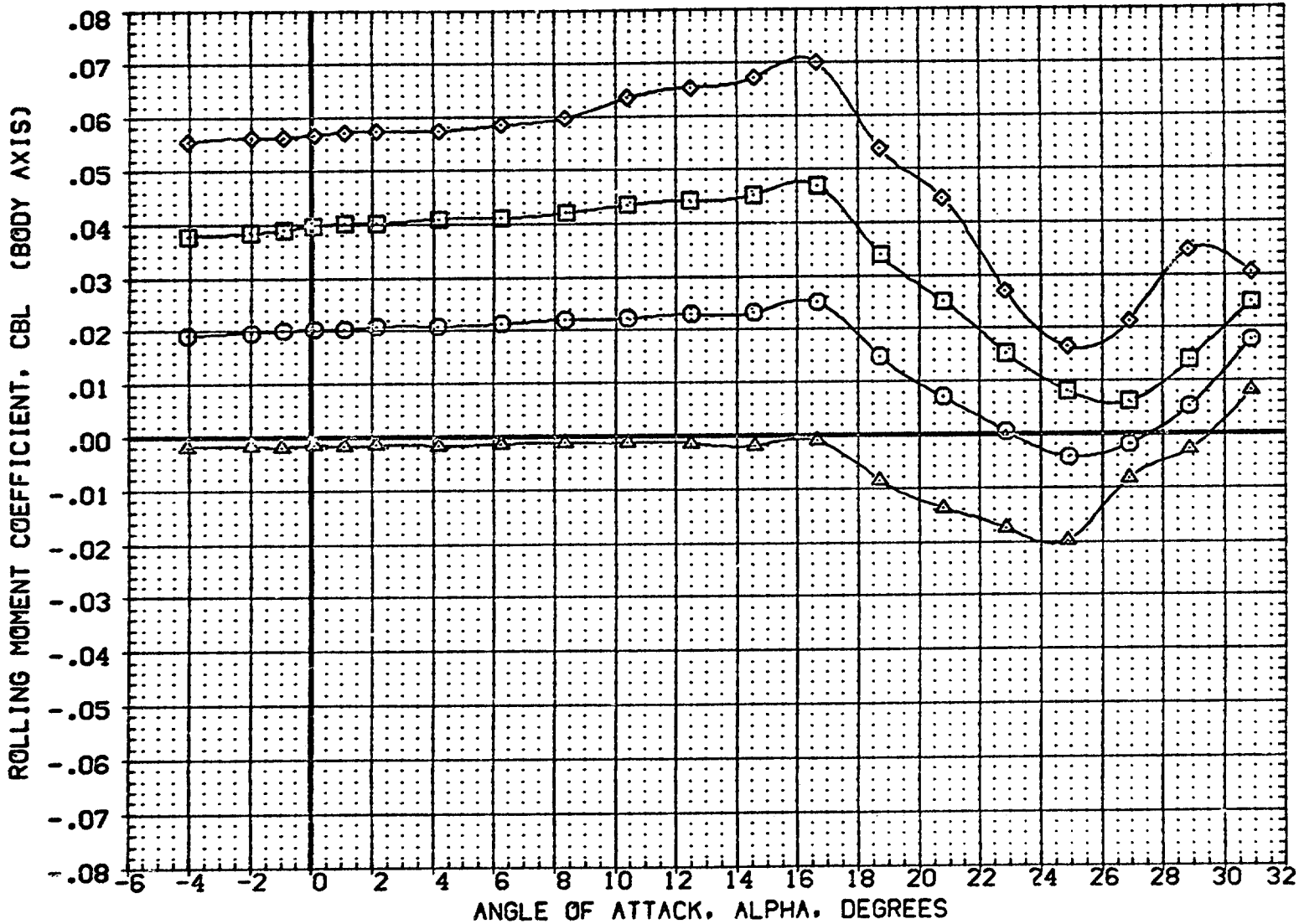


FIG 16 AILERONS DEFLECTED - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(RDU005)	○	CA71C B16C507 F1W87 E18V3R3X9
(RDU007)	□	CA71C B16C507 F1W87 E18V3R3X9
(RDU010)	◇	CA71C B16C507 F1W87 E18V3R3X9
(RDU001)	△	CA71C B16C507 F1W87 E18V3R3X9

AILRON	ELEVON	BDFLAP	BETA
5.000	.000	-18.000	.000
10.000	.000	-18.000	.000
15.000	.000	-18.000	.000
.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

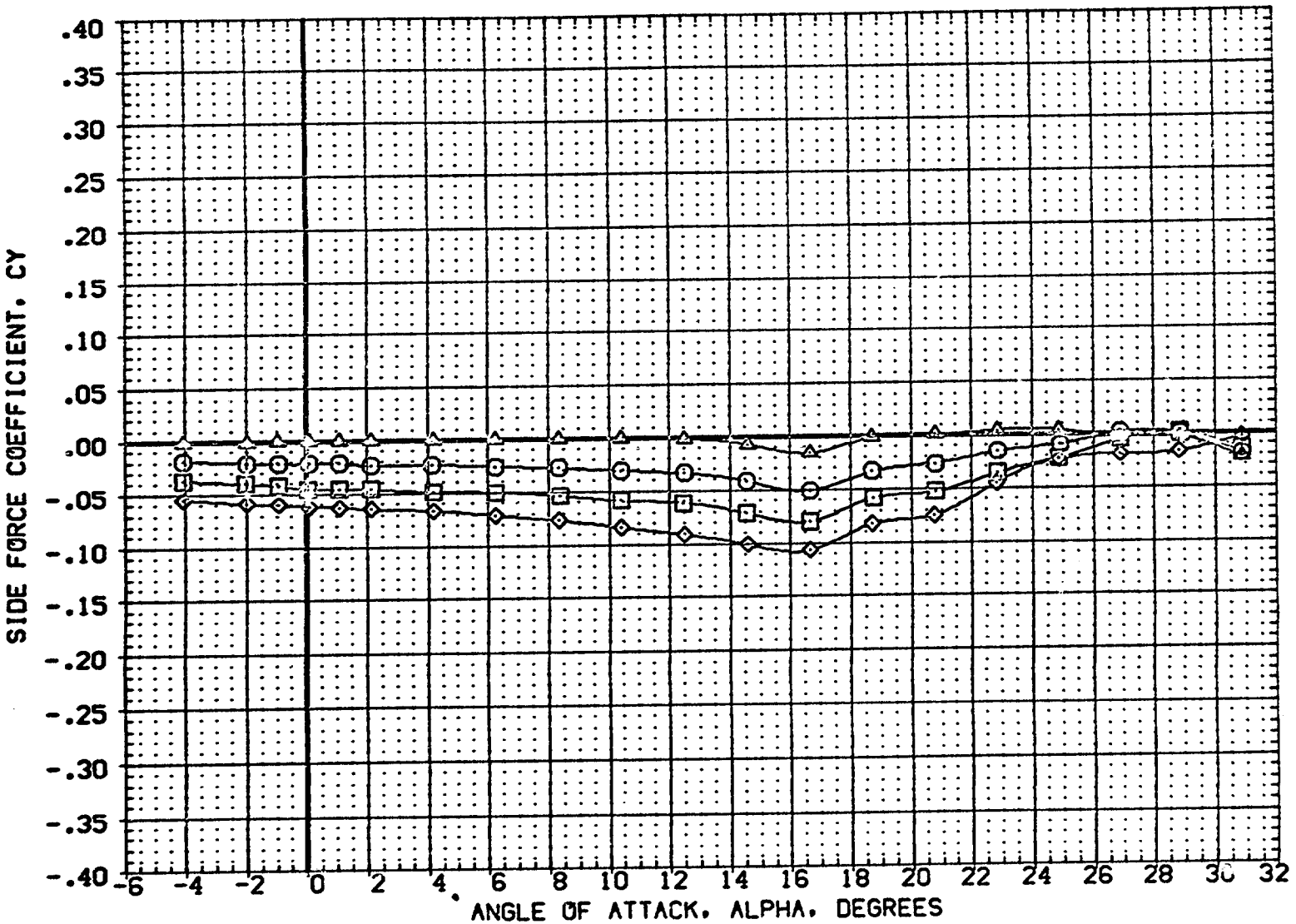


FIG 16 AILERONS DEFLECTED - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(FDU005)	○	CA71C B16C507 F1W87 E18V3R3X9
(FDU007)	□	CA71C B16C507 F1W87 E18V3R3X9
(FDU010)	◇	CA71C B16C507 F1W87 E18V3R3X9

DALRON	ELEVON	BDFLAP	BETA
5.000	.000	-18.000	.000
10.000	.000	-18.000	.000
15.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

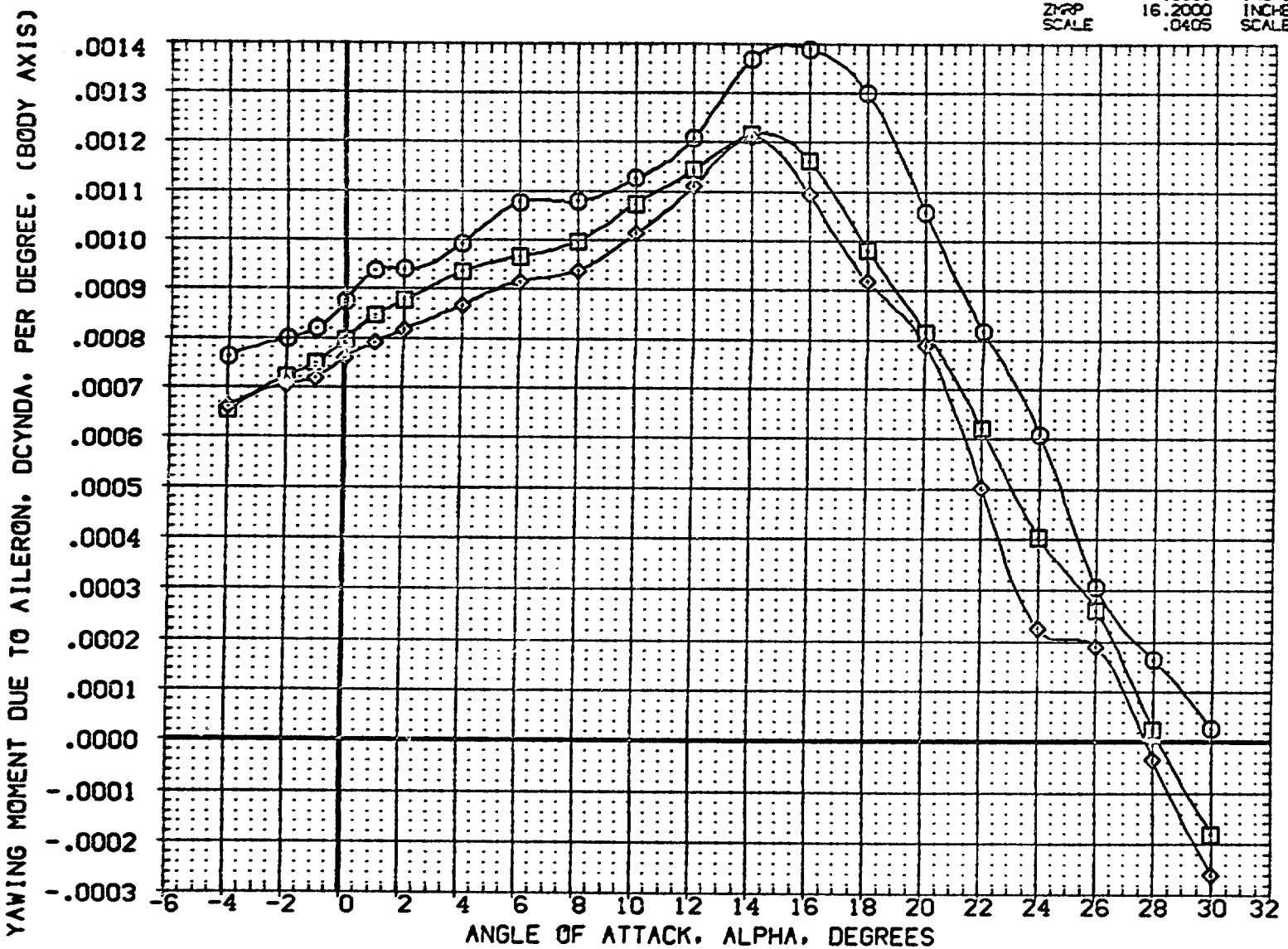


FIG 17 AILERON EFFECTIVENESS DERIVATIVES - NO NACELLES

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION			
(FDU005)	□	CA71C	B16C507	F1V87 E18V3R3X9
(FDU007)	□	CA71C	B16C507	F1V87 E18V3R3X9
(FDU010)	◇	CA71C	B16C507	F1V87 E18V3R3X9

DALRON	ELEVON	BCFLAP	BETA
5.000	.000	-18.000	.000
10.000	.000	-18.000	.000
15.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

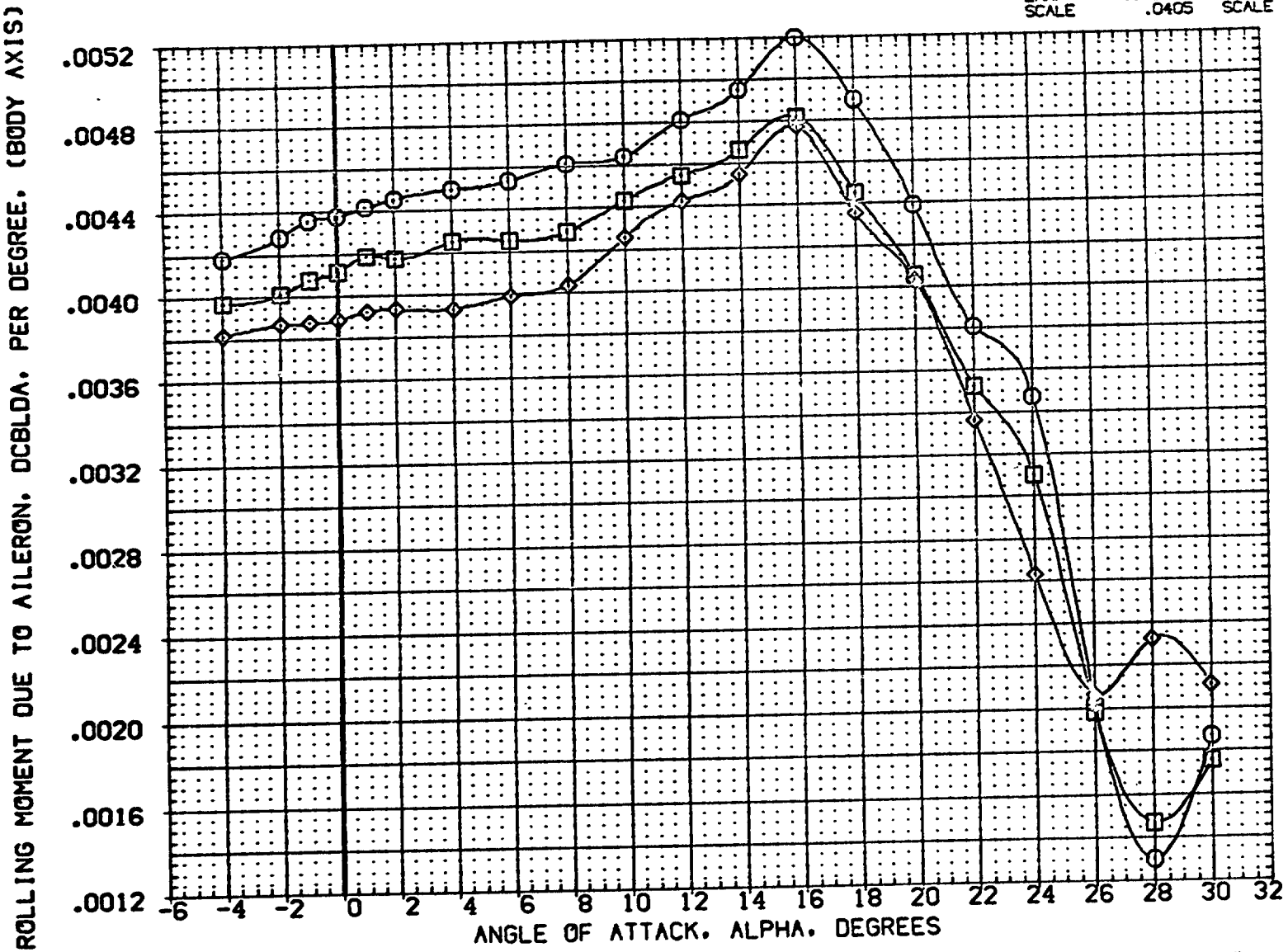


FIG 17 AILERON EFFECTIVENESS DERIVATIVES - NO NACELLES

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	ELEVON	BOFLAP	BETA
(FDU005) □	0A71C B16C507 F1V87 E18V3R3X9	5.000	.000	-18.000	.000
(FDU007) ◻	0A71C B16C507 F1V87 E18V3R3X9	10.000	.000	-18.000	.000
(FDU010) ◇	0A71C B16C507 F1V87 E18V3R3X9	15.000	.000	-18.000	.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

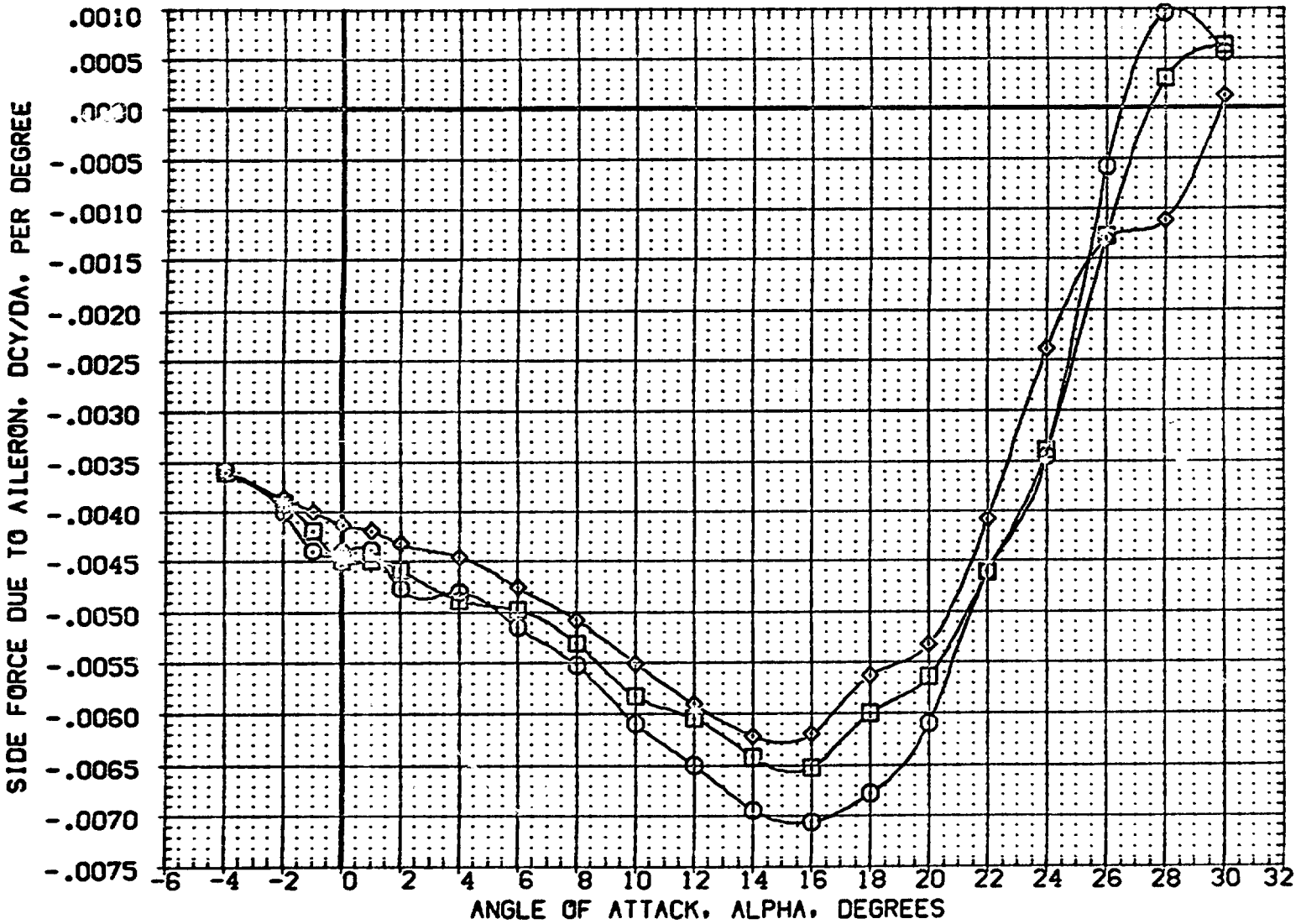


FIG 17 AILERON EFFECTIVENESS DERIVATIVES - NO NACELLES

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILRON	NACX/L	NACLIP	NACBTA
(ROU042) ○	0A71C B16CSD7J34F1V87 E18V3KGX10	10.000	.000	7.000	5.000
(ROU037) □	0A71C B16CSD7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

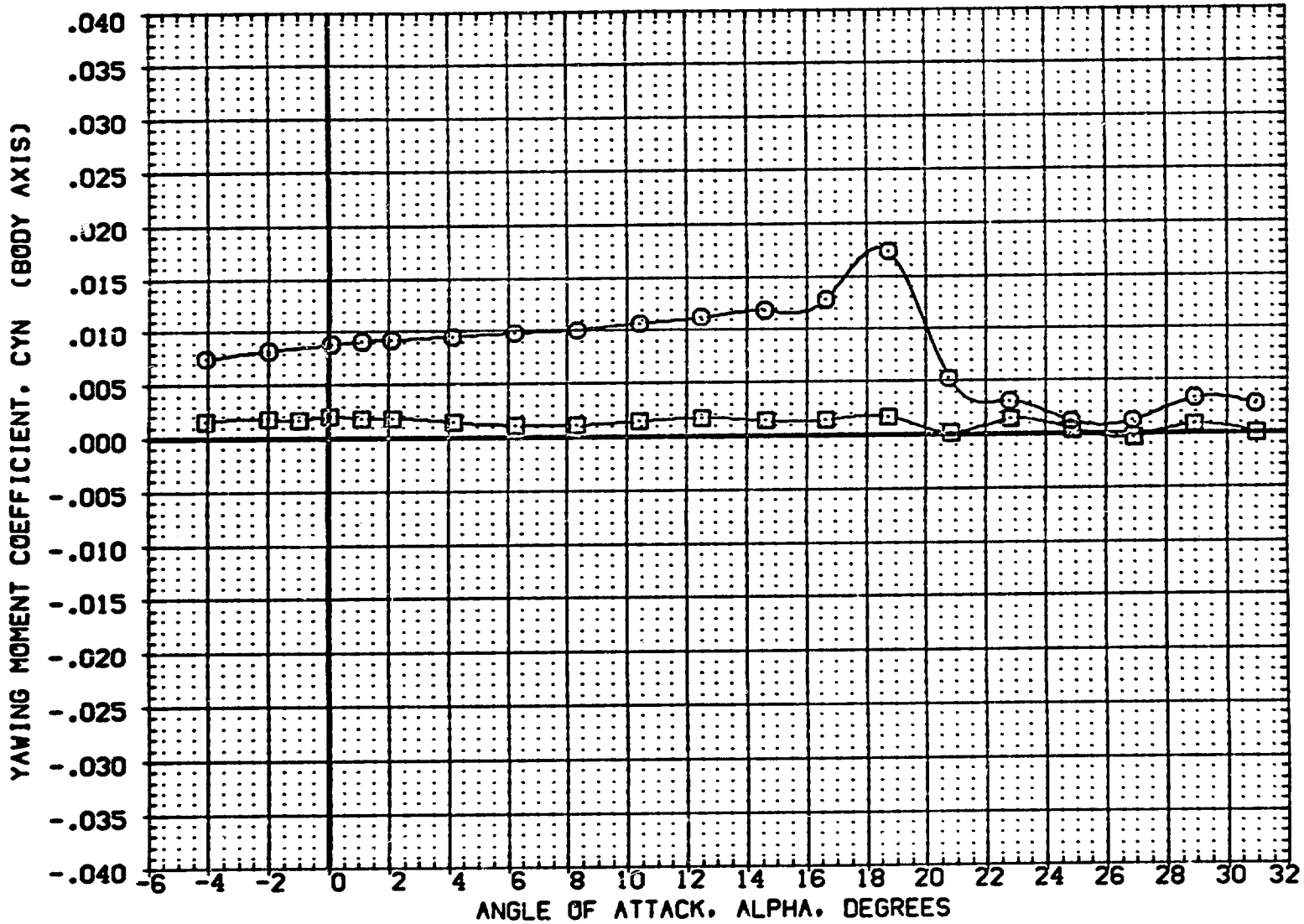


FIG 18 AILERONS DEFLECTED - CLUSTERED NACELLES UNDERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RDU042)	DA7:C B16C5D7J34F1V87 E18V3R3X10
(RDU037)	DA7:C B16C5D7J34F1V87 E18V3R3X10

AILRON	NACX/L	NACLIP	NACBTA
10.000	.000	7.000	5.000
.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

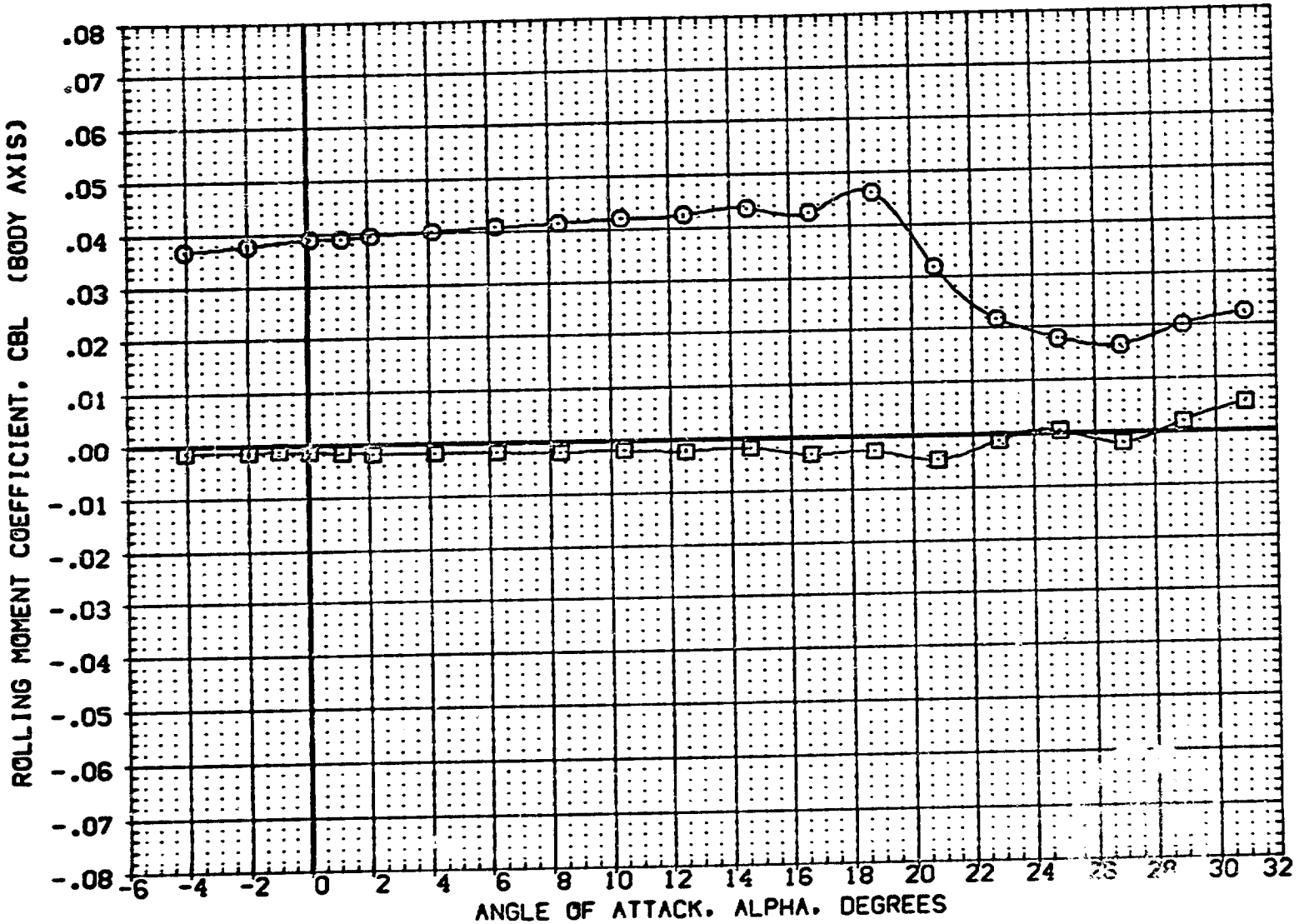


FIG 18 AILERONS DEFLECTED - CLUSTERED NACELLES UNDERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(RDU042)	○	CA71C B16CSD7J34F1V87 E18V3R3X10
(RDU037)	□	CA71C B16CSD7J34F1V87 E18V3R3X10

AILRON	NACX/L	NACLIP	NACBTA
10.000	.000	7.000	5.000
.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5574	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

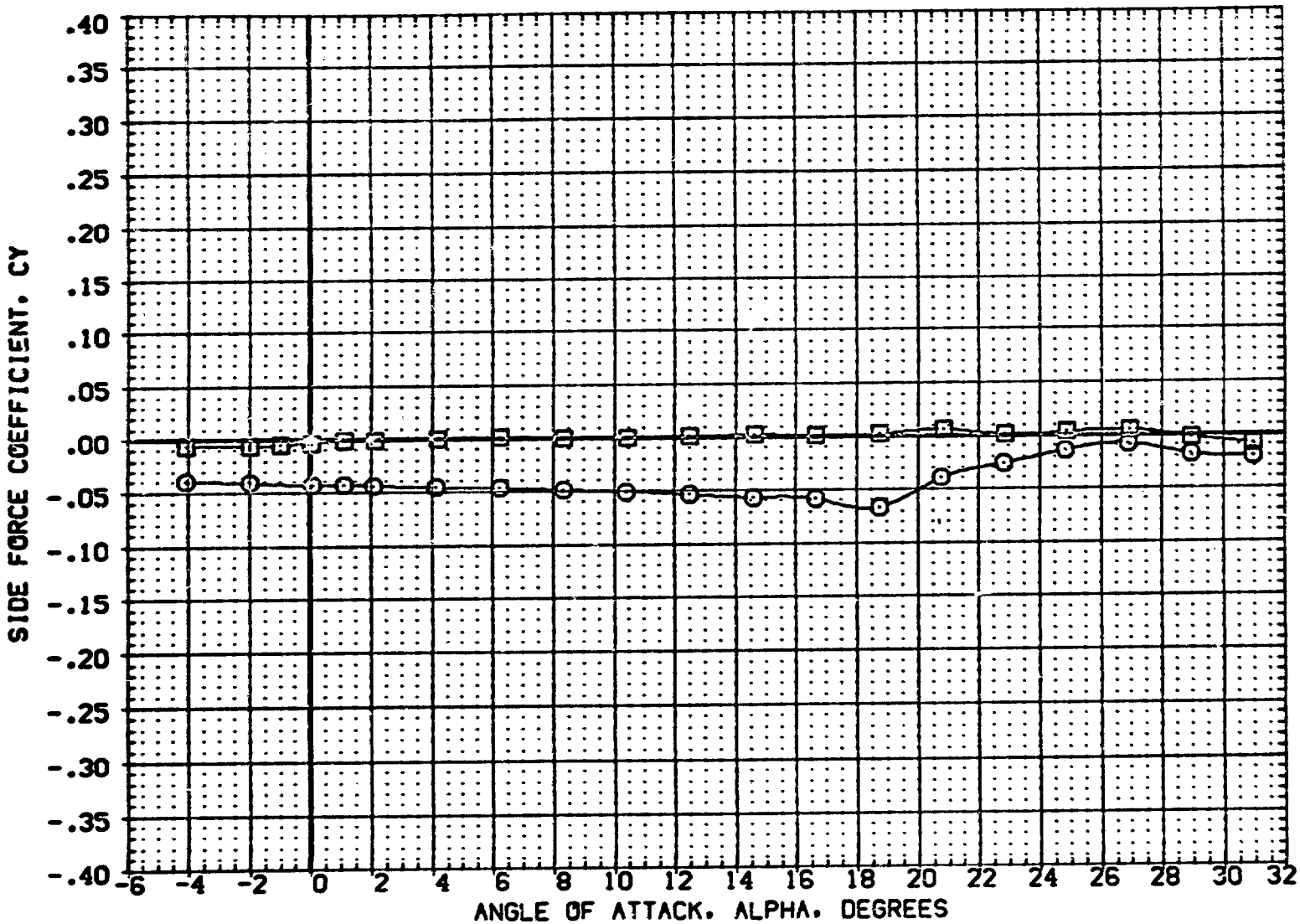


FIG 18 AILERONS DEFLECTED - CLUSTERED NACELLES UNDERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	NACX/L	BOFLAP	NACBTA
(FDU042) ○	CA71C B16C50TJ34F1V87 E18V3R3X10	10.000	.000	-19.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

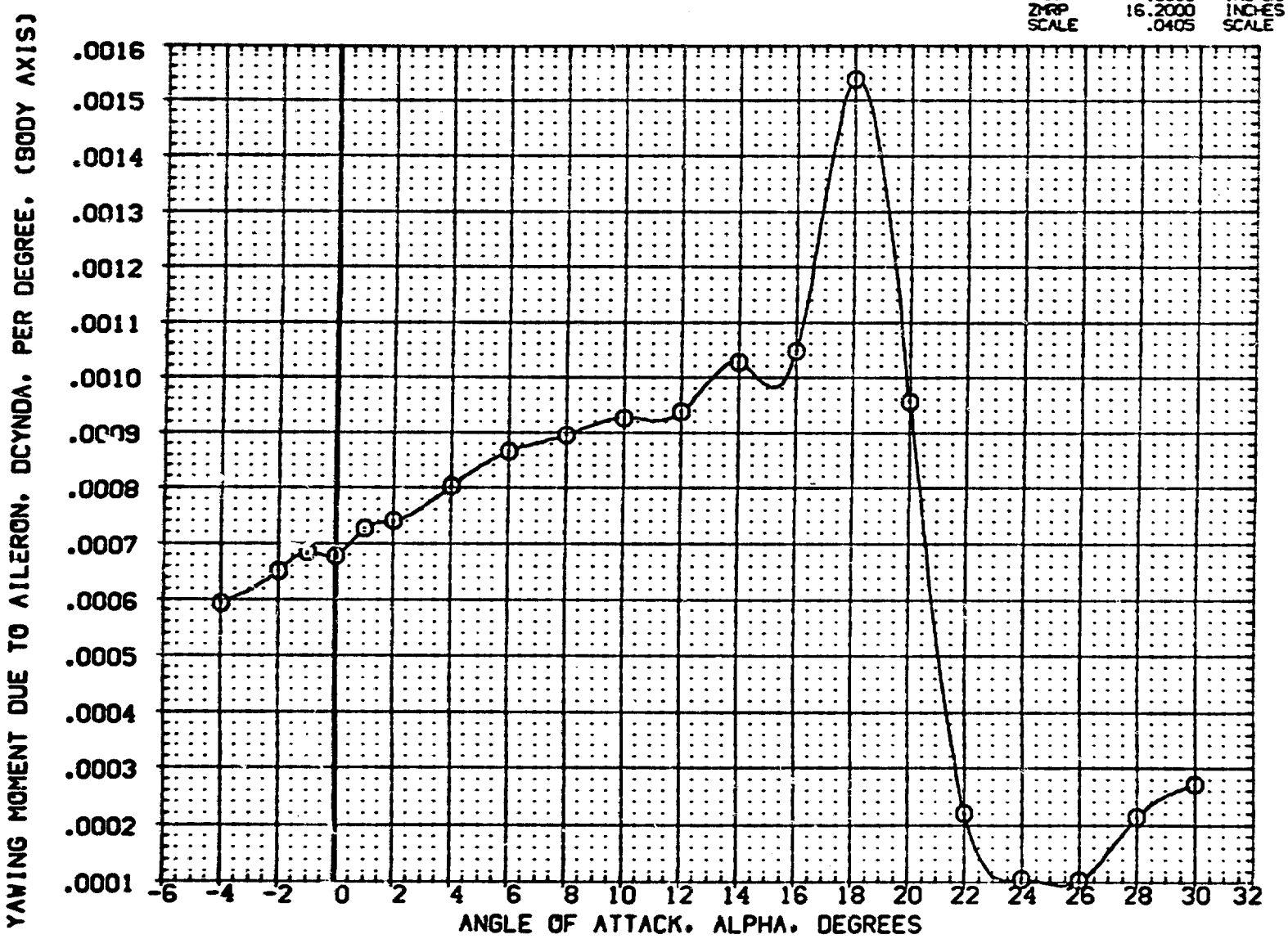


FIG 19 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	NACX/L	BOFLAP	NACBTA
(FDU042) ○	CA71C B16C507J34F1V87 E18V3R3X10	10.000	.000	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

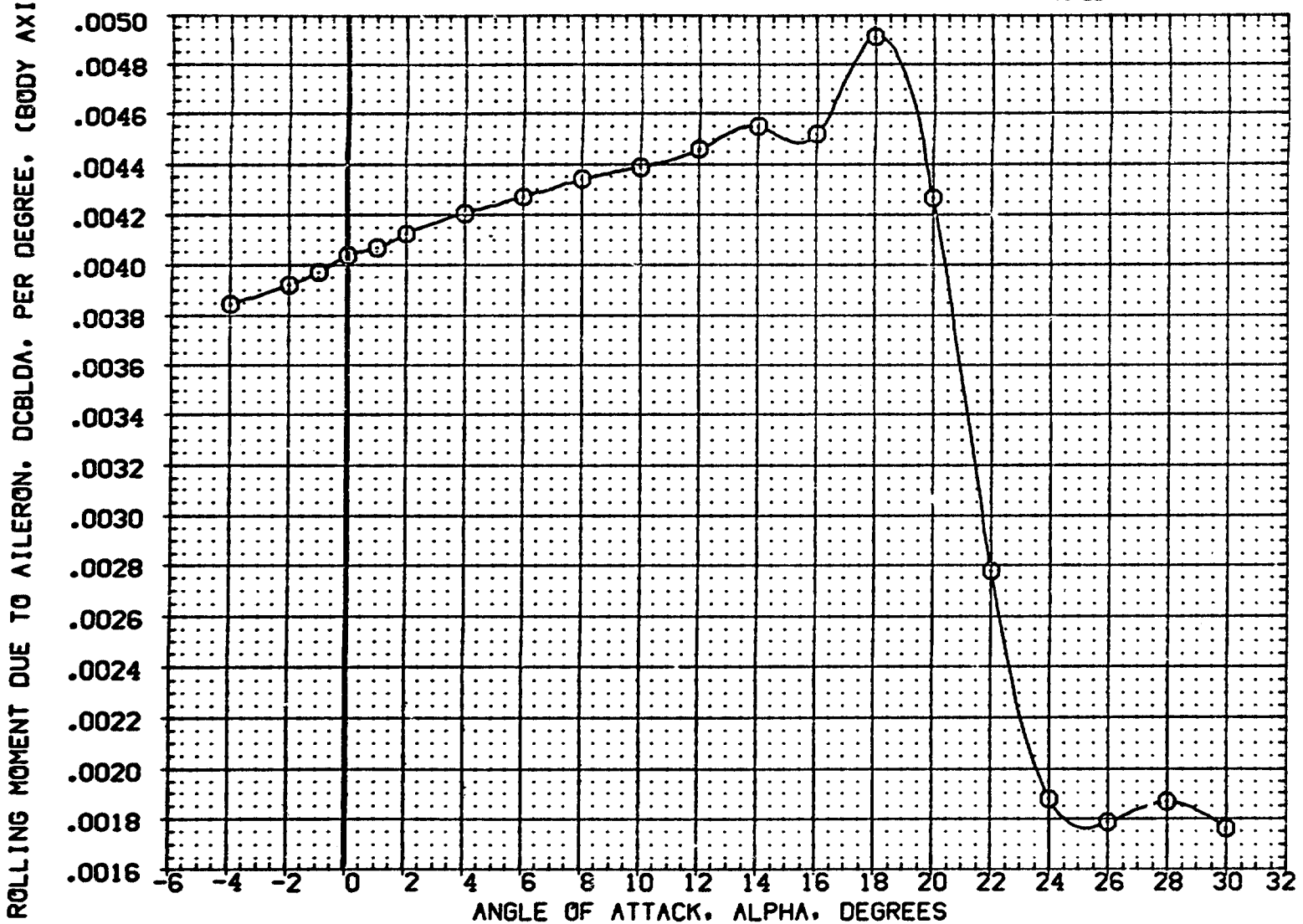


FIG 19 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .21

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(FDU042) ○ CA71C B16C507J34F1V87 E18V3R3X10

DALRON	NACX/L	BOFLAP	NACBTA
10.000	.000	-18.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

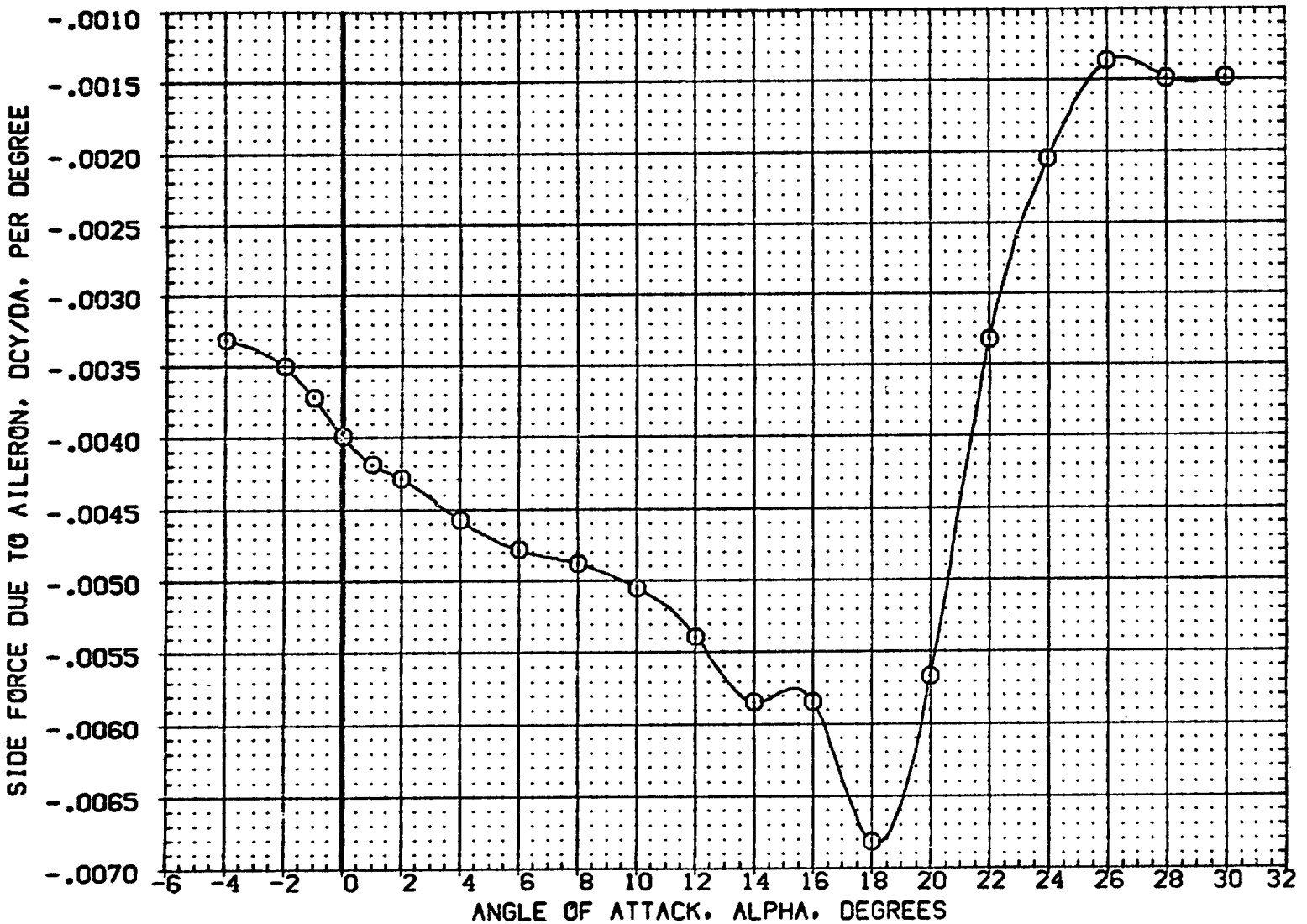


FIG 19 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RDU043) ○	0A71C B16CSD7J34F1W87 E18V3R3X10
(RDU045) □	0A71C B16CSD7J34F1W87 E18V3R3X10

AILRON	NACX/L	NACLIP	NACBTA
10.000	.270	7.000	5.000
.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2295	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

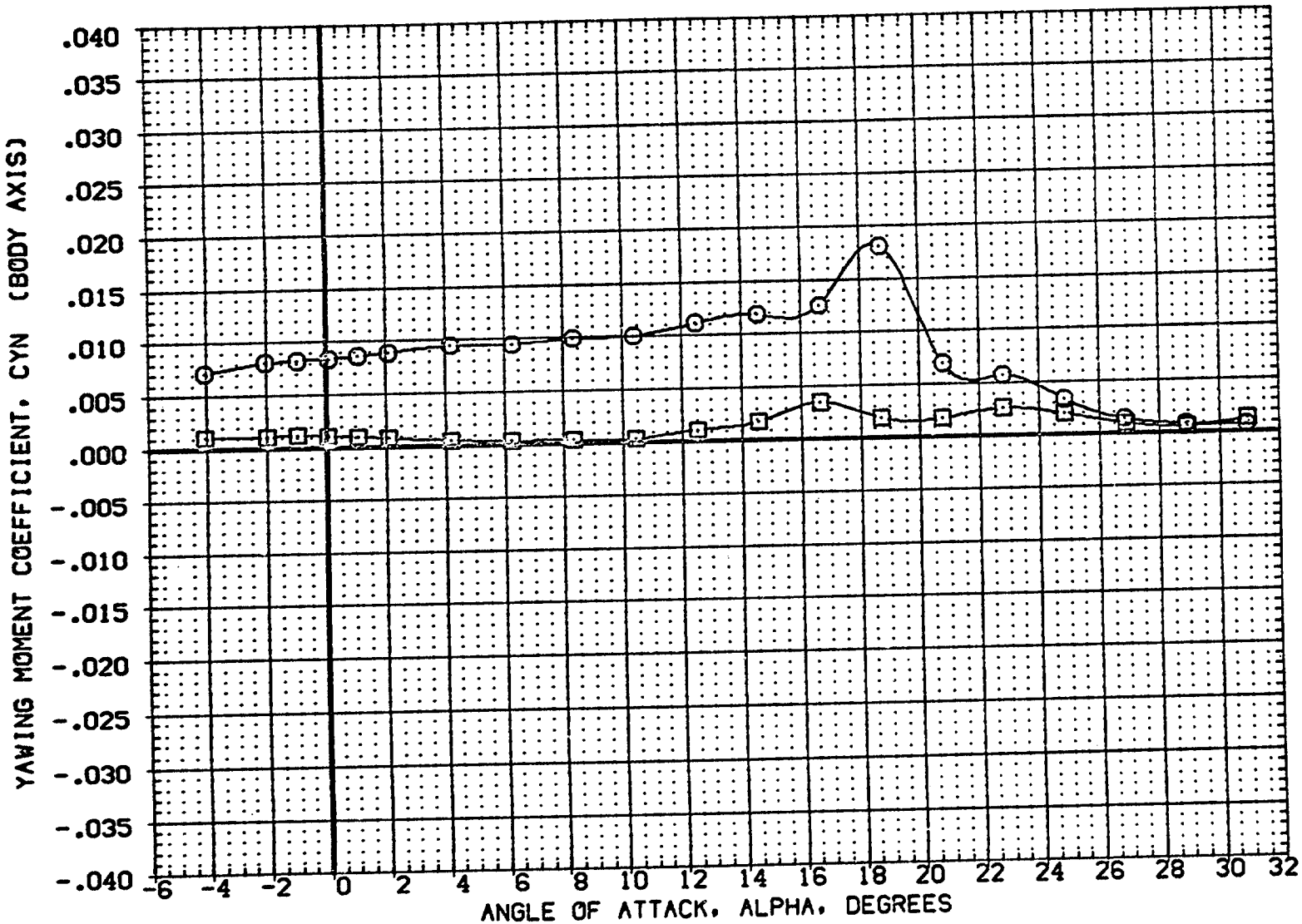


FIG 20 AILERONS DEFLECTED - CLUSTERED NACELLES UNDERWING XO = 1005

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	AILRON	NACX/L	NACLIP	NACBTA
(ROU043)	○	CA71C B16CSD7J34F1V87 E18V3R3X10	10.000	.270	7.000	5.000
(ROU046)	□	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2239	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

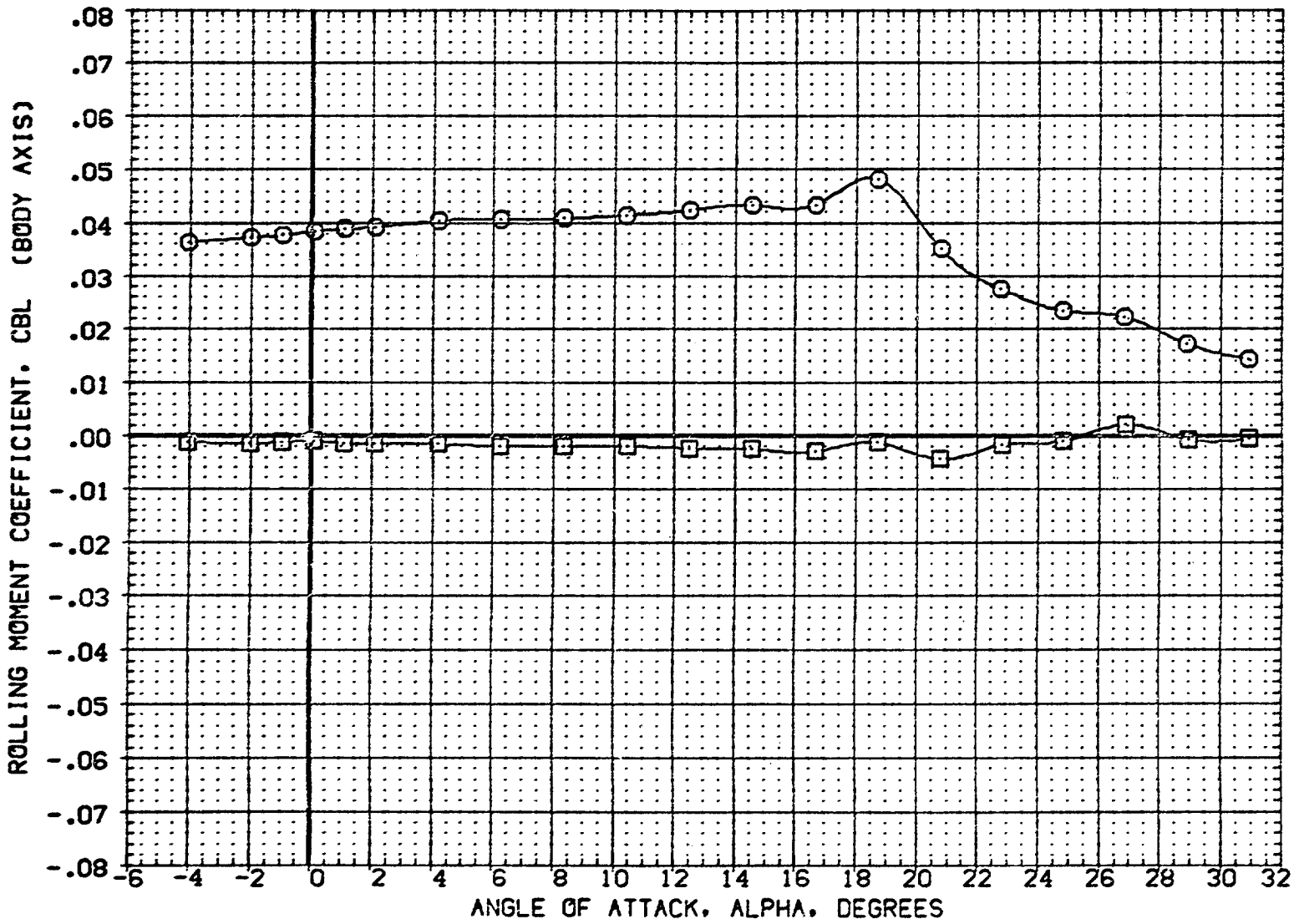


FIG 20 AILERONS DEFLECTED - CLUSTERED NACELLES UNDERWING XO = 1005

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	AILRON	NACX/L	NACLIP	NACBTA
(RDU043)	○	0A71C B16C5D7J34F1V87 E18V3R3X10	10.000	.270	7.000	5.000
(RDU046)	□	0A71C B16C5D7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

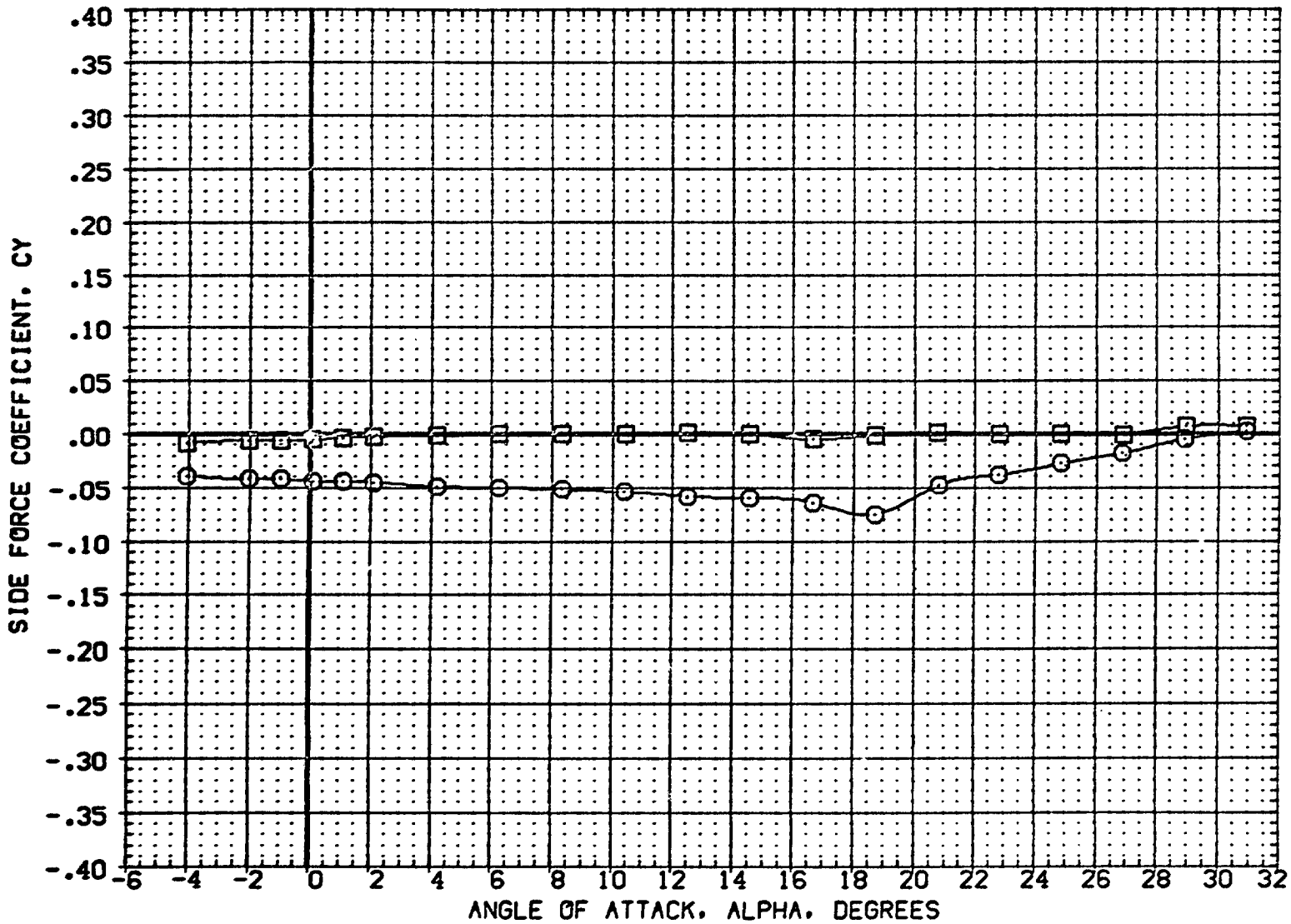


FIG 20 AILERONS DEFLECTED - CLUSTERED NACELLES UNDERWING XO = 1005

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	NACX/L	SDFLAP	NACBTA
(FDU043) ○	DA71C B16C5D7J34F1V87 E18V3R3X10	10.000	.270	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

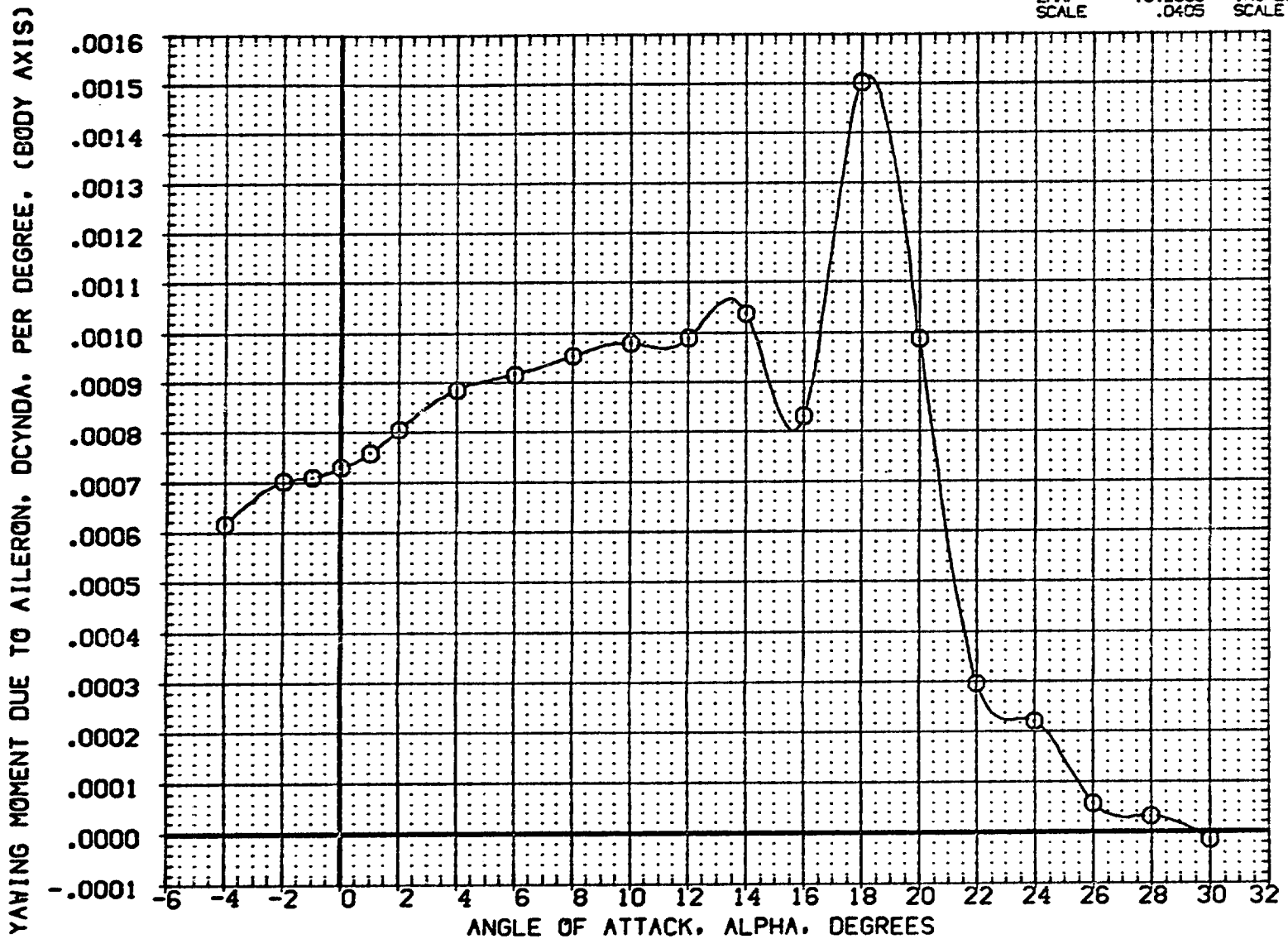


FIG 21 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES UNDERWING XO=1005

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	NACX/L	BOFLAP	NACBTA
(FDU043) ○	CA71C B16CSD7J34F1V87 E18V3R3X10	10.000	.270	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE



FIG 21 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES UNDERWING XO=1005

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	NACX/L	BDFLAP	NACBTA
(FDU043) O	0A71C B16CS07J34F1V87 E18V3R3X10	10.000	.270	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE



FIG 21 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES UNDERWING XO=1005

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RDUC54)	CA71C B16C507J34F1V87 E18V3R3X10
(RDUC49)	CA71C B16C507J34F1V87 E18V3R3X10

AILRON	NACX/L	NACLIP	NACBTA
10.000	.530	7.000	5.000
.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

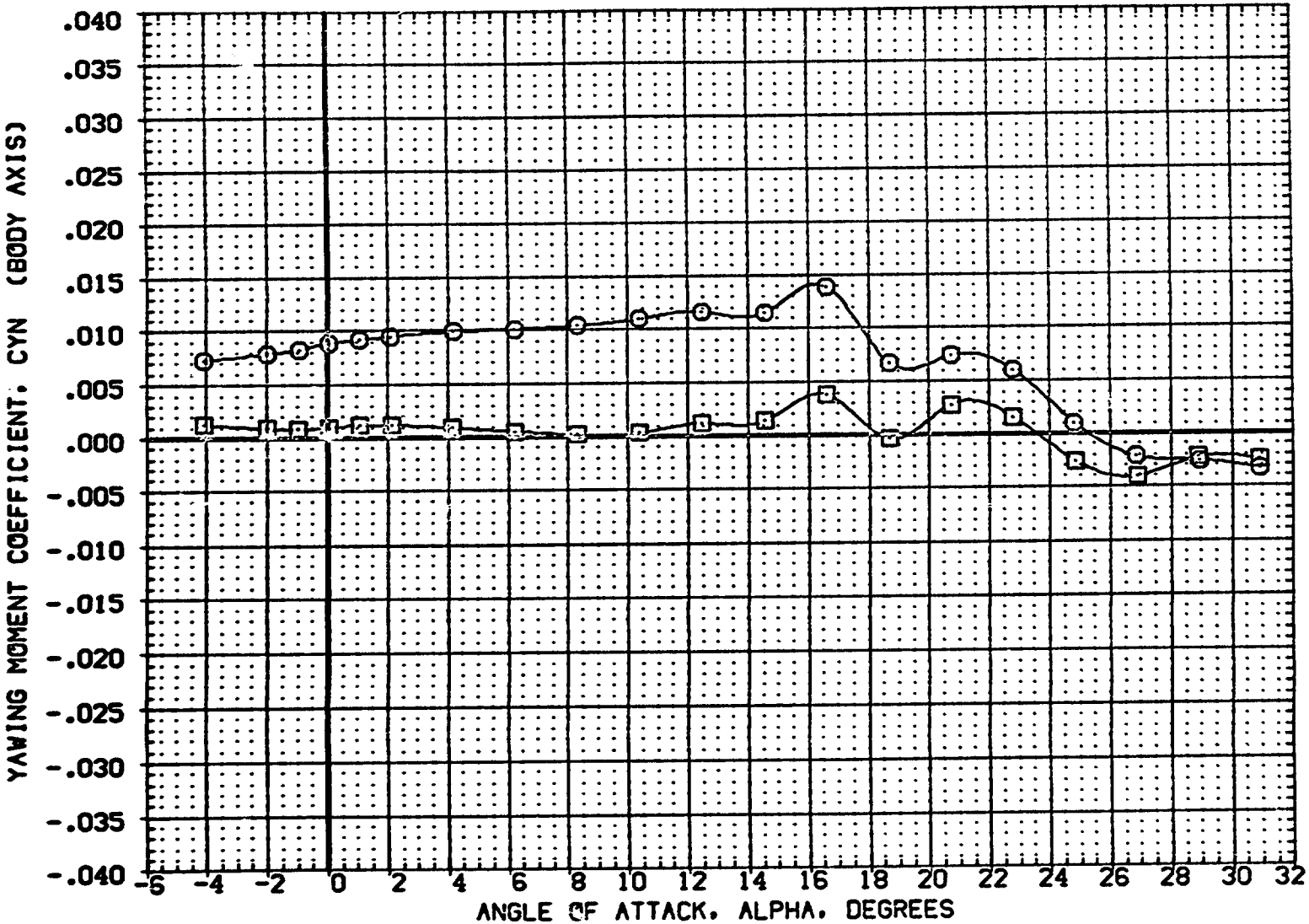


FIG 22 AILERONS DEFLECTED - CLUSTERED NACELLES UNDERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(RDU054)	○	CA71C B16C507J34F1V87 E1SV3R3X10
(RDU049)	□	CA71C B16C507J34F1V87 E1SV3R3X10

AILRON	NACX/L	NACLIP	NACBTA
10.000	.530	7.000	5.000
.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

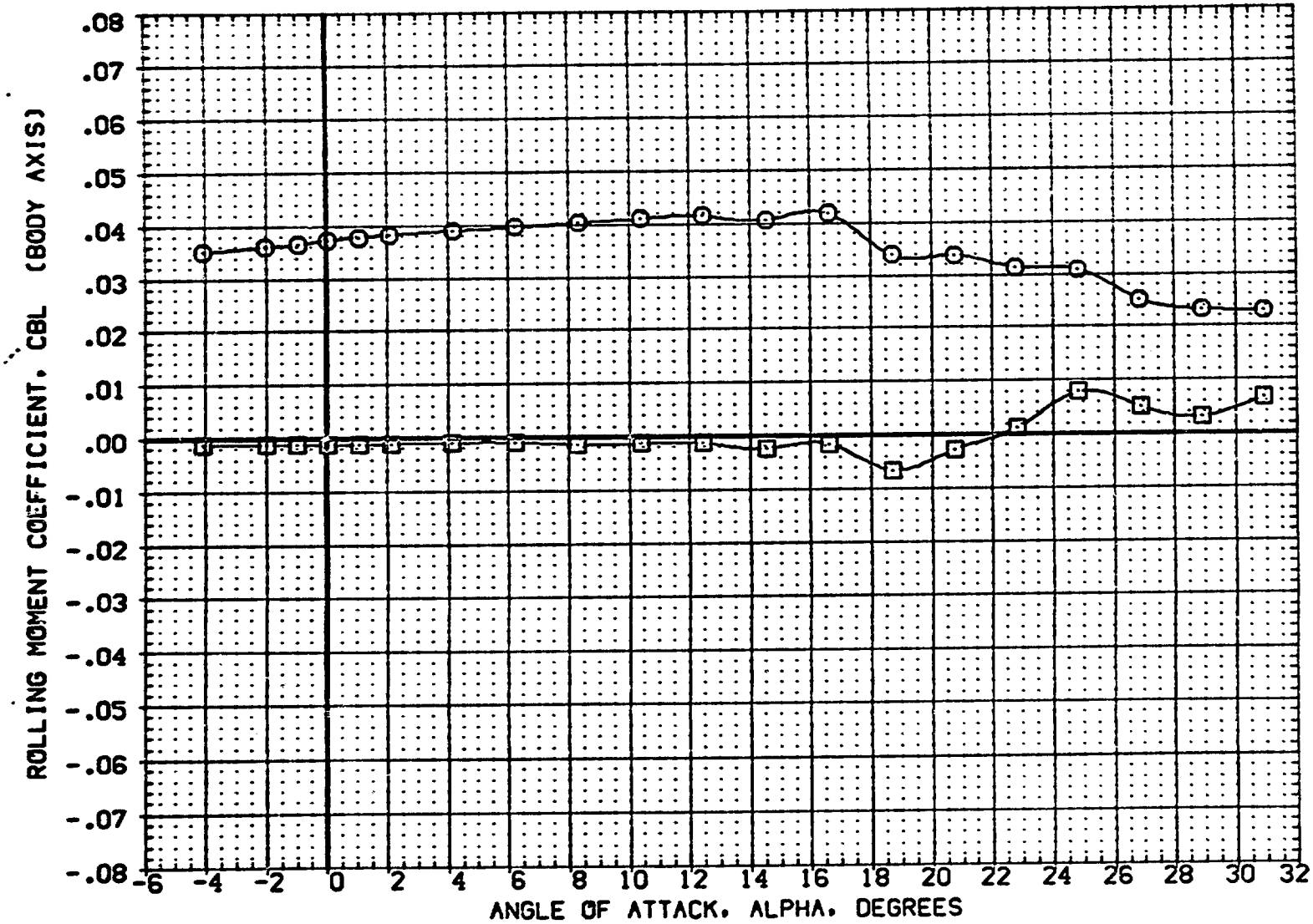


FIG 22 AILERONS DEFLECTED - CLUSTERED NACELLES UNDERWING XO = 1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ROU054)	○	0A71C B16CSD7J34F1V87 E18V3R3X10
(ROU049)	□	0A71C B16CSD7J34F1V87 E18V3R3X10

AILRON	NACX/L	NACLIP	NACBTA
10.000	.530	7.000	5.000
.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

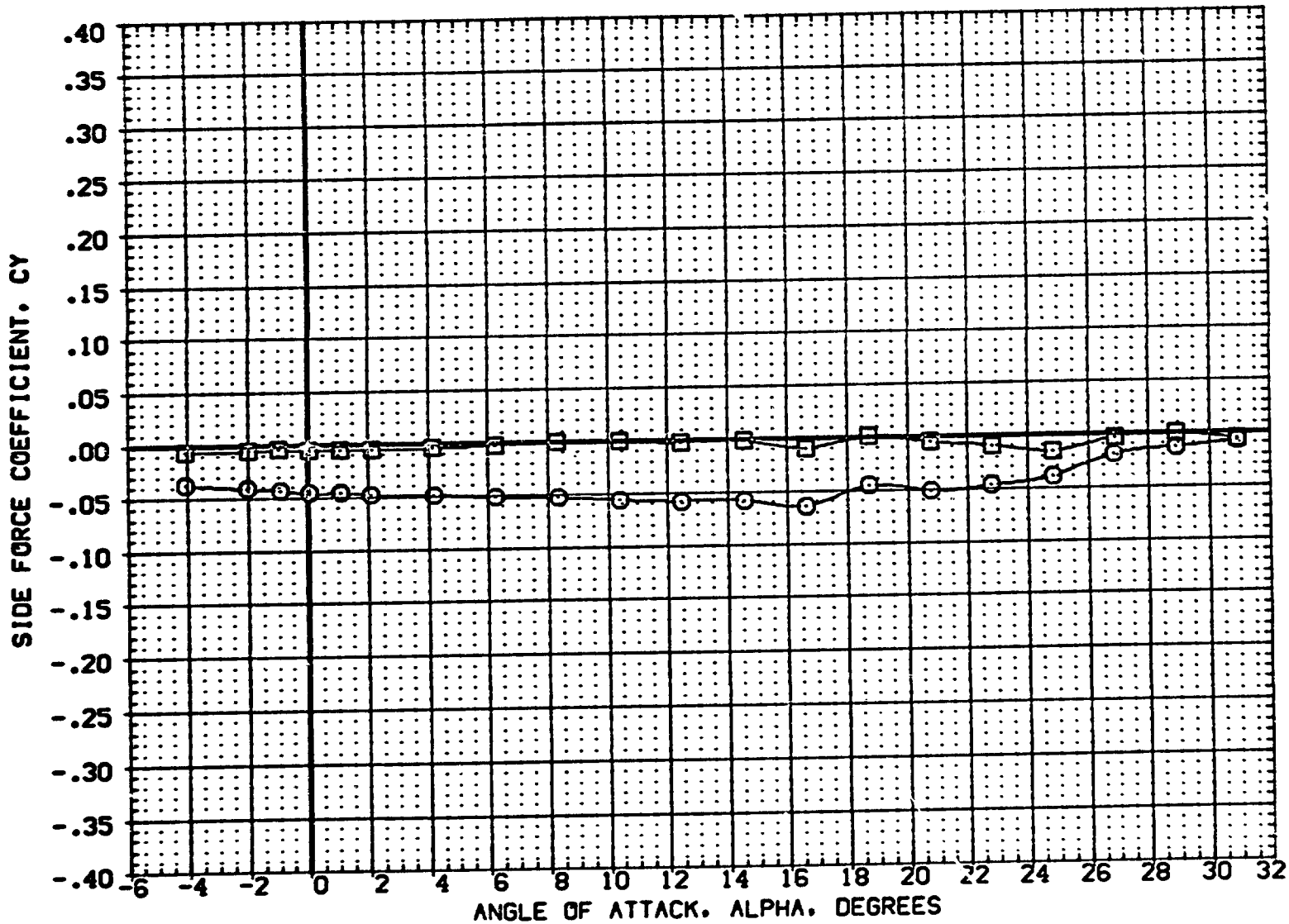


FIG 22 AILERONS DEFLECTED - CLUSTERED NACELLES UNDERWING XC = 1060

(A)MACH = .20

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(FDU054) ○ CA71C B16CS07J34F1W87 E18V3R3X10

DALRON	NACX/L	BDFLAP	NACBTA
10.000	.530	-18.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE



FIG 23 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES UNDERWING XO=1060

(A)MACH = .21

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(FDUO54) O CA71C B16CSD7J34F1V87 E18V3R3X10

DALRON	NACX/L	BDFLAP	NACBTA
10.000	.530	-18.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

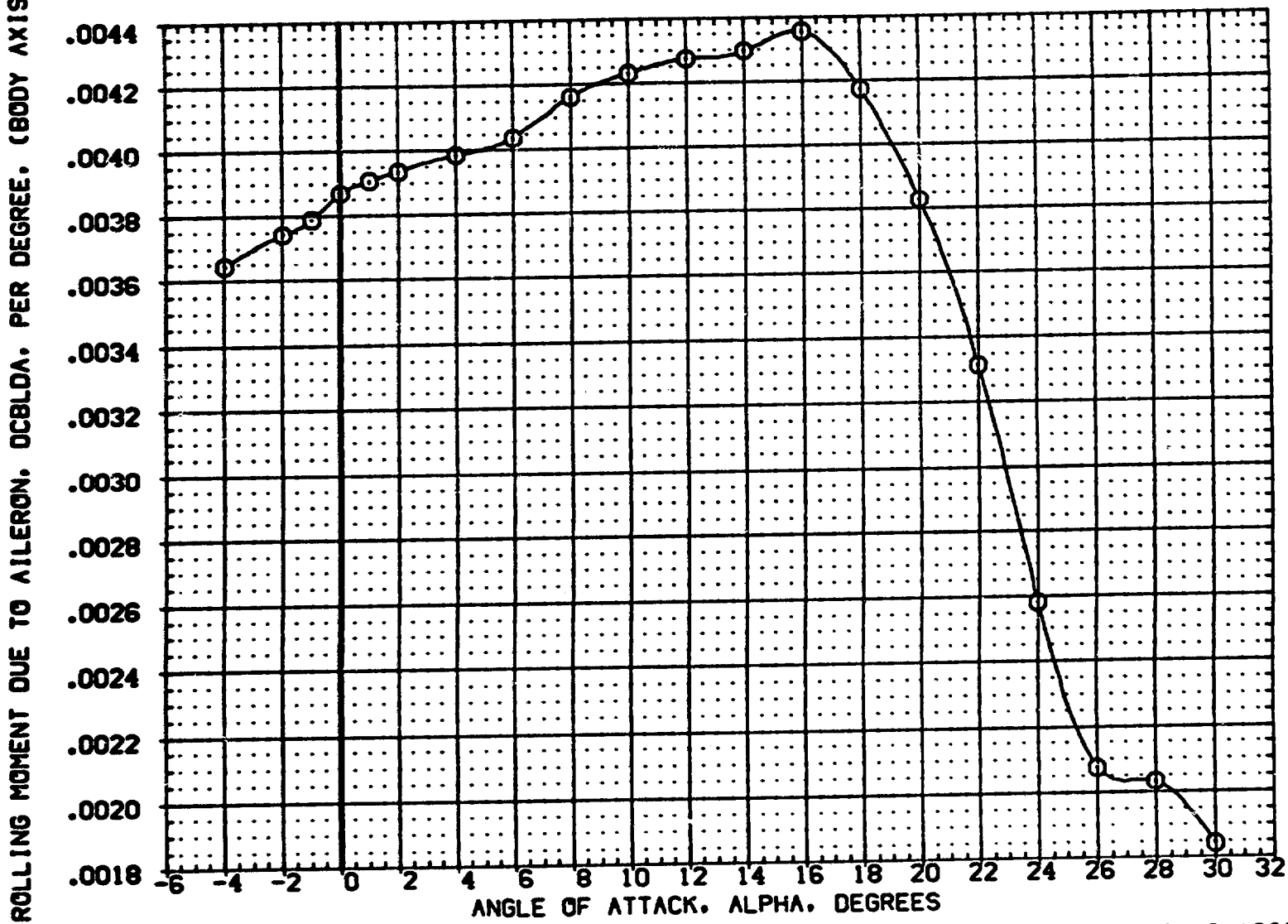


FIG 23 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES UNDERWING XO=1060

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	NACX/L	BDFLAP	NACBTA
(FDUC54) O	CA71C B16CSD7J34F1V87 E18V3R3X10	10.000	.530	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

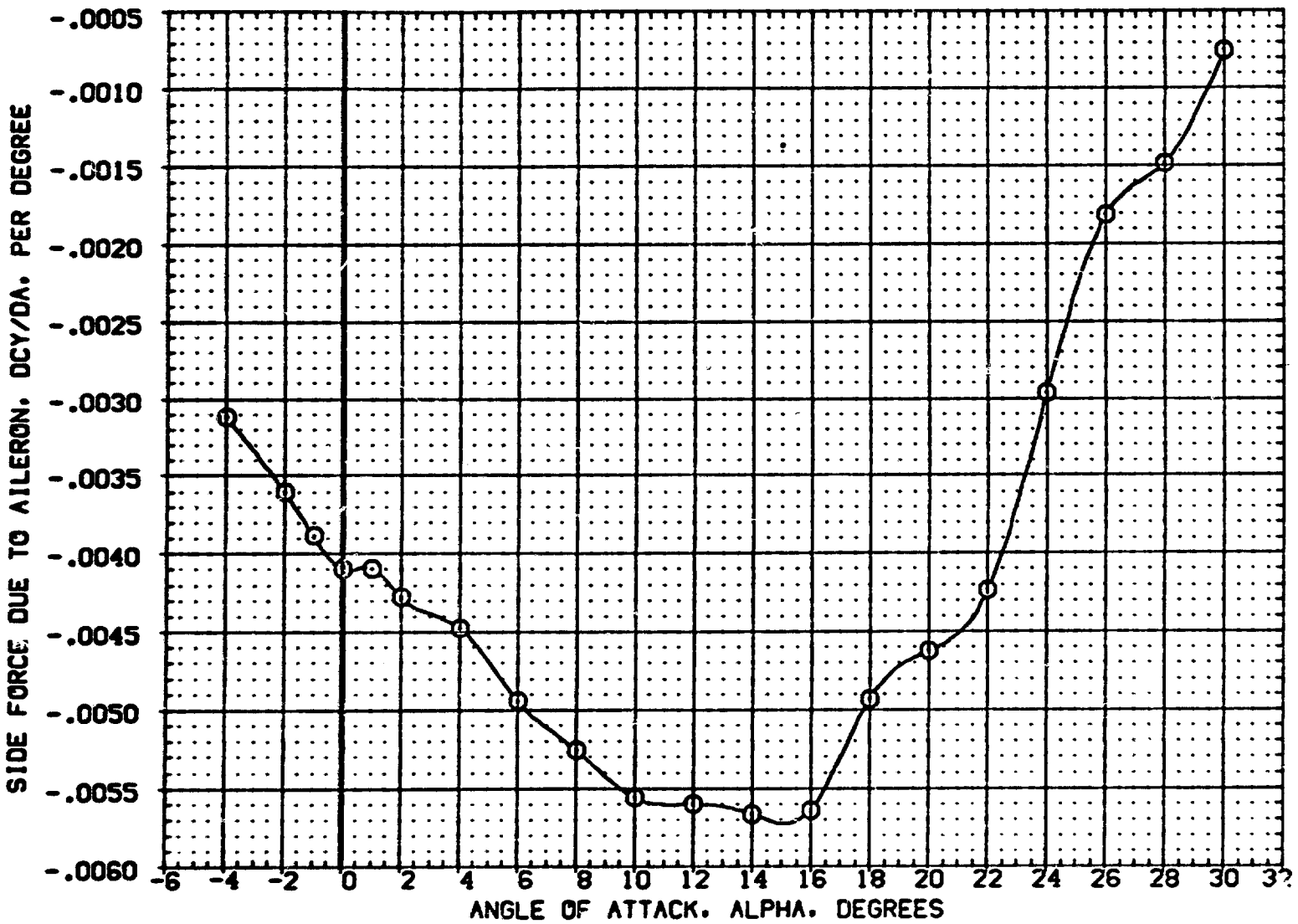


FIG 23 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES UNDERWING XO=1060

(A)MACH = .21

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	AILRON	NACX/L	NACLIP	NACBTA
(RDU063)	○	0A71C B16C5D7J3SF1V87 E18V3R3X10	10.000	.530	7.000	5.000
(RDU058)	□	0A71C B16C5D7J3SF1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

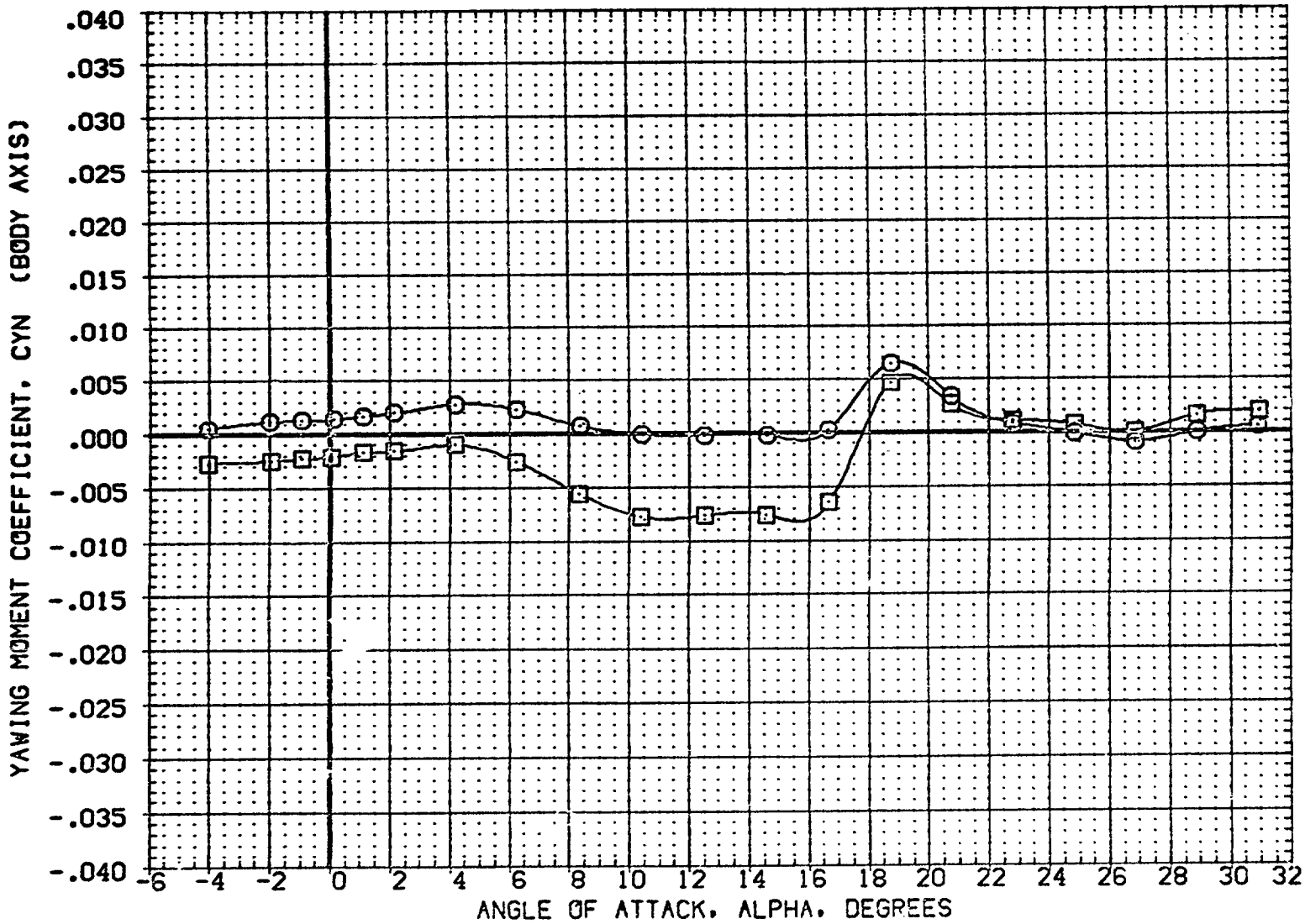


FIG 24 AILERONS DEFLECTED - CLUSTERED NACELLES 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(RDU063)	○	0A71C B16C507J35F1V87 E18V3R3X10
(RDU058)	□	0A71C B16C507J35F1V87 E18V3R3X10

AILRON	NACX/L	NACLIP	NACBTA
10.000	.530	7.000	5.000
.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

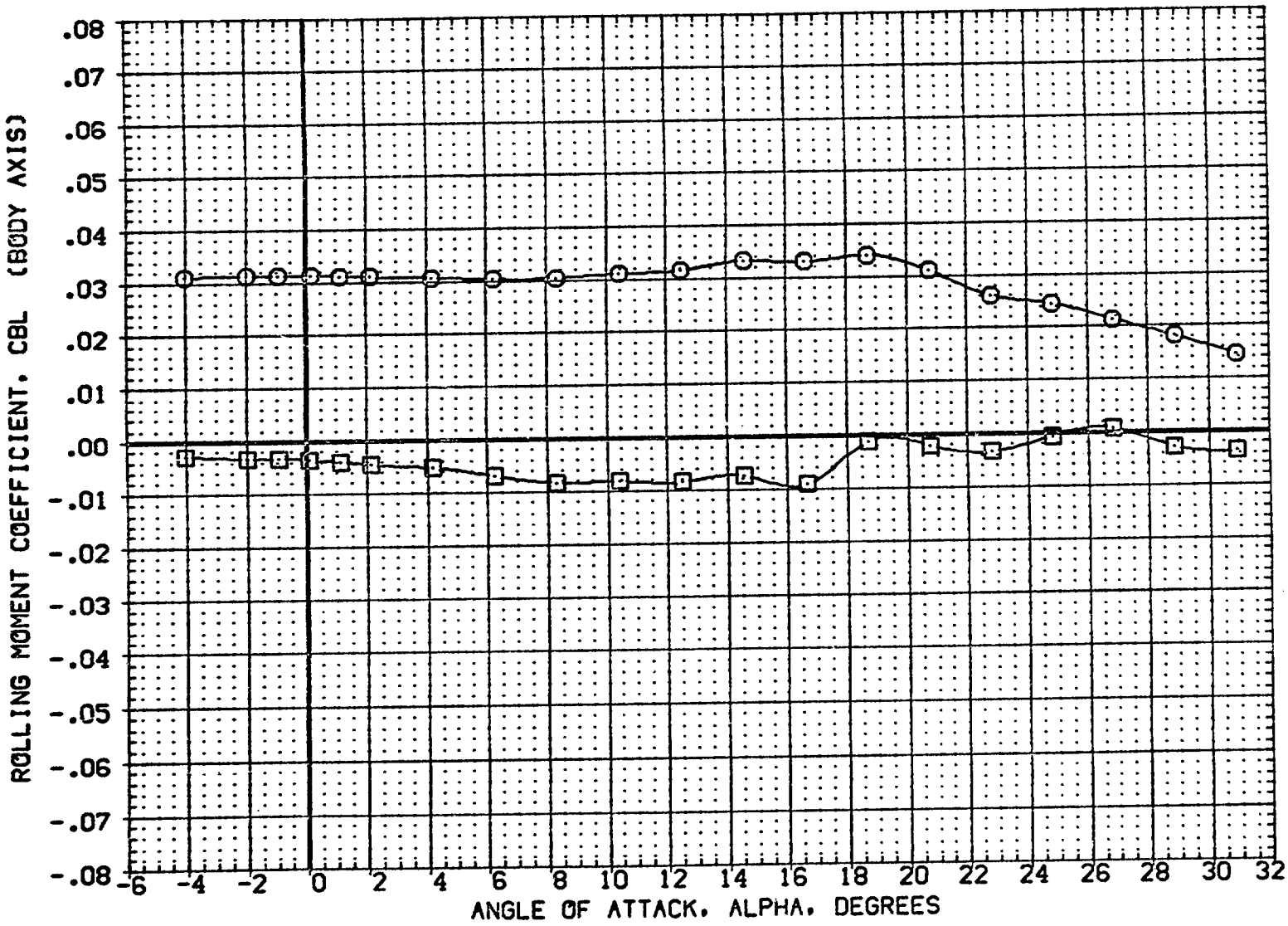


FIG 24 AILERONS DEFLECTED - CLUSTERED NACELLES 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILRON	NACX/L	NACLIP	NACBTA
(RDU063) ○	CA71C B16C507J35F1W87 E18V3R3X10	10.000	.530	7.000	5.000
(RDU058) □	CA71C B16C507J35F1W87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

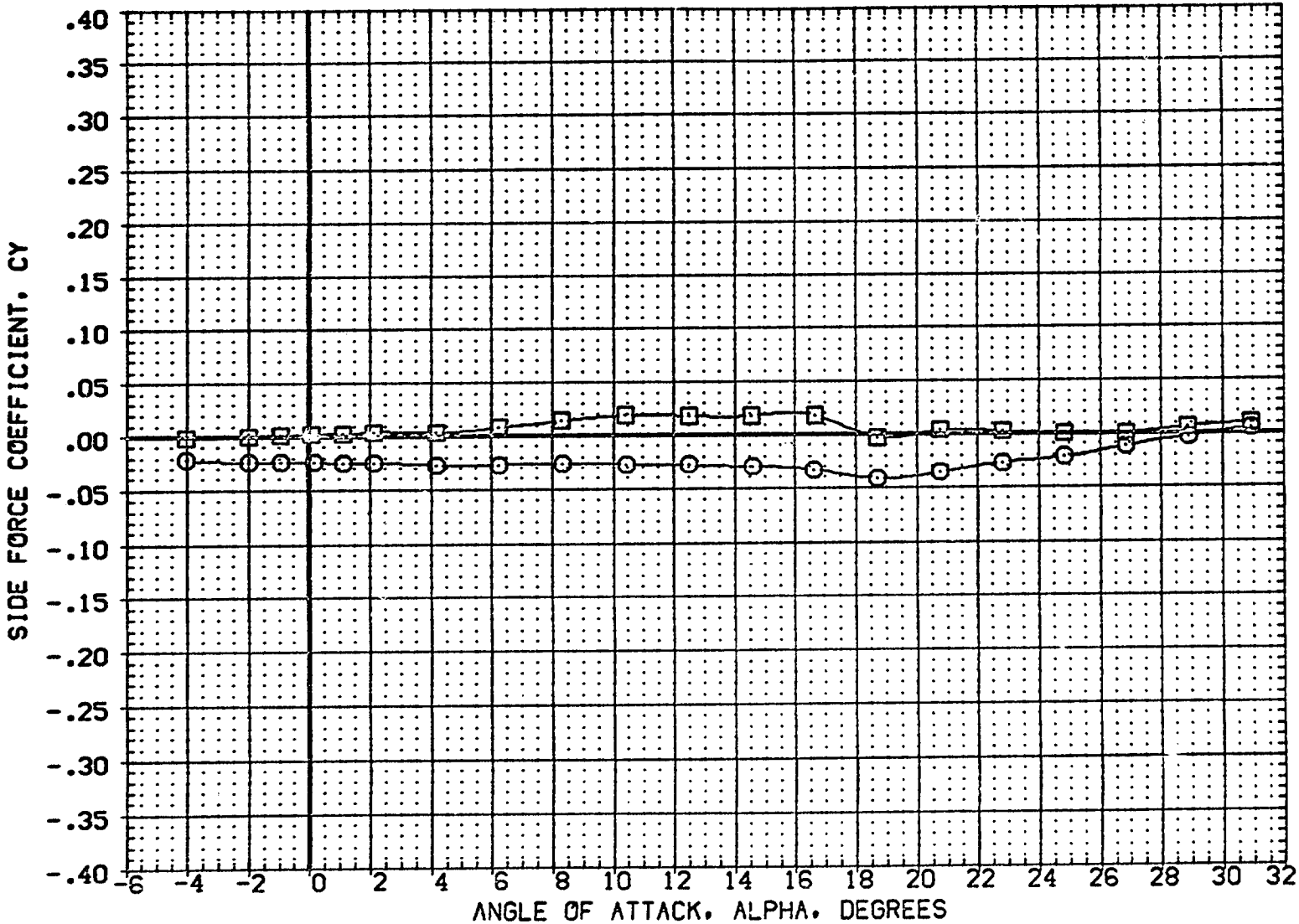


FIG 24 AILERONS DEFLECTED - CLUSTERED NACELLES 2 OVERWING XO = 1060

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	NACX/L	BDFLAP	NACBTA
(FDU063) ○	0A71C B16CS07J3SF1V87 E18V3R3X10	10.000	.530	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

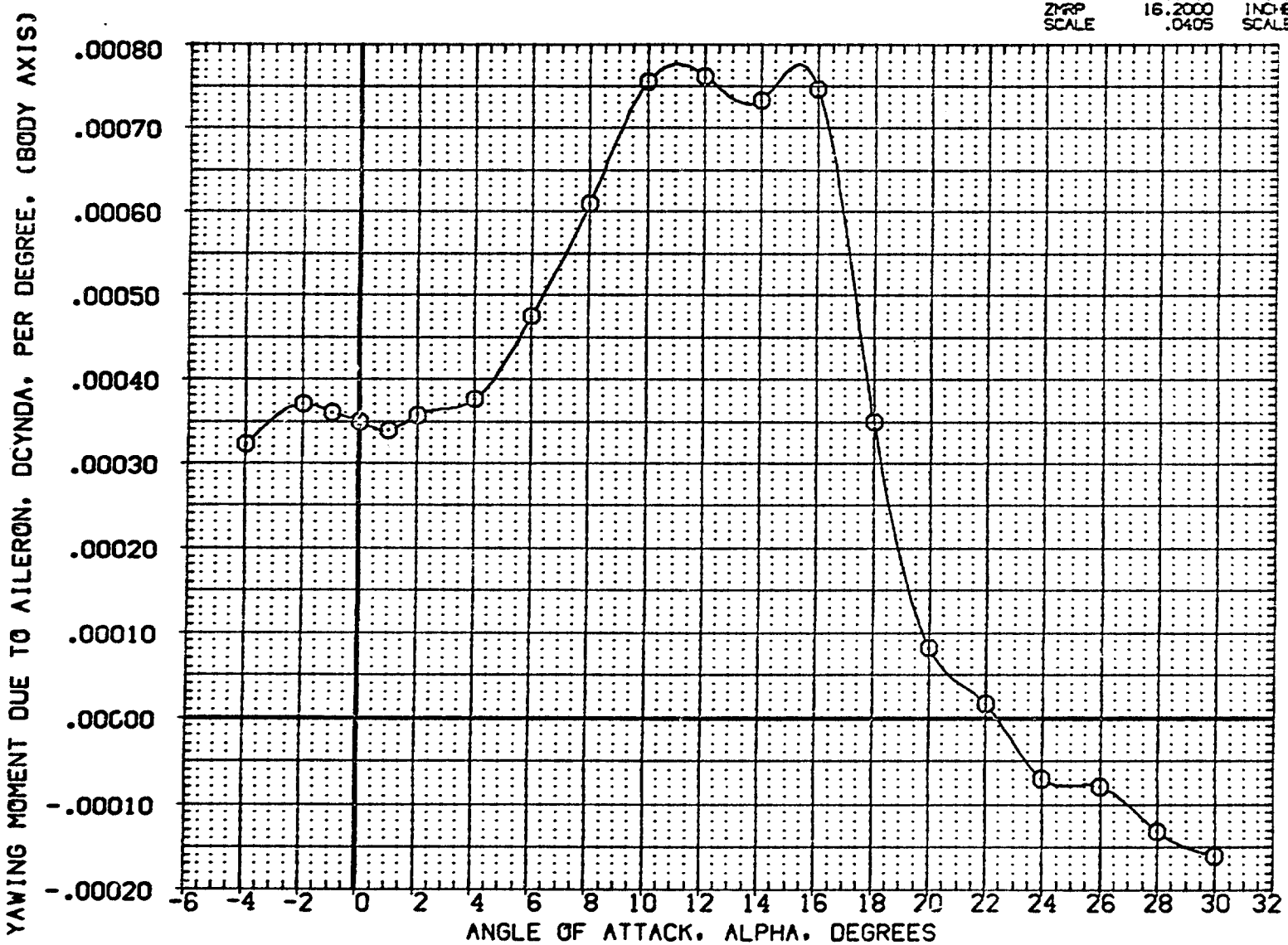


FIG 25 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES 2 OVERWING X=1060

(A)MACH = .21

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(FDU063) ○ CA71C B16C507J35F1V87 E18V3R3X10

DALRON	NACX/L	BDFLAP	NACBTA
10.000	.530	-18.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

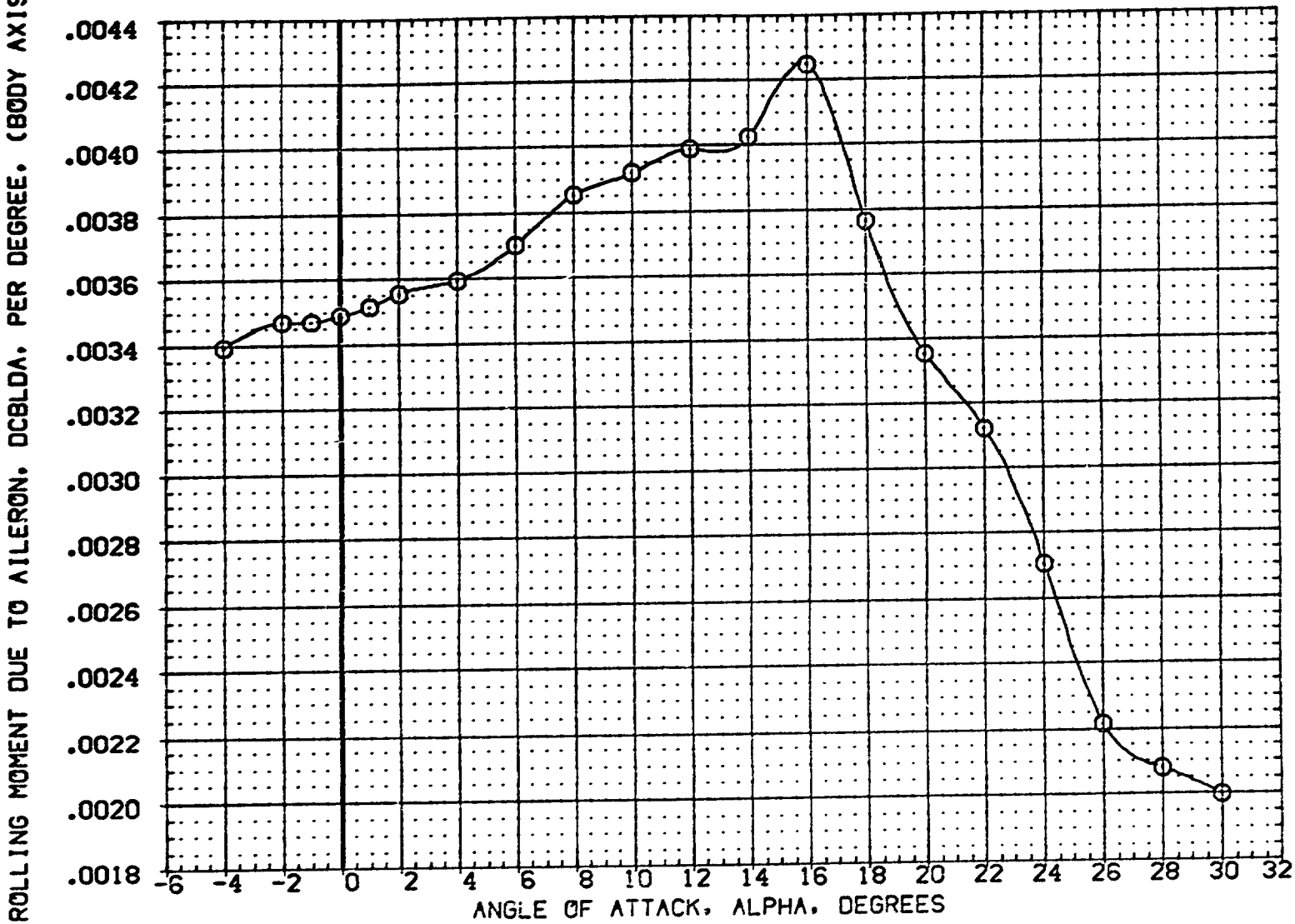


FIG 25 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES 2 OVERWING X=1060

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	NACX/L	BOFLAP	NACBTA
(FDU063) ○	CA71C B16C5D7J3SF1V87 E18V3R3X10	10.000	.530	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

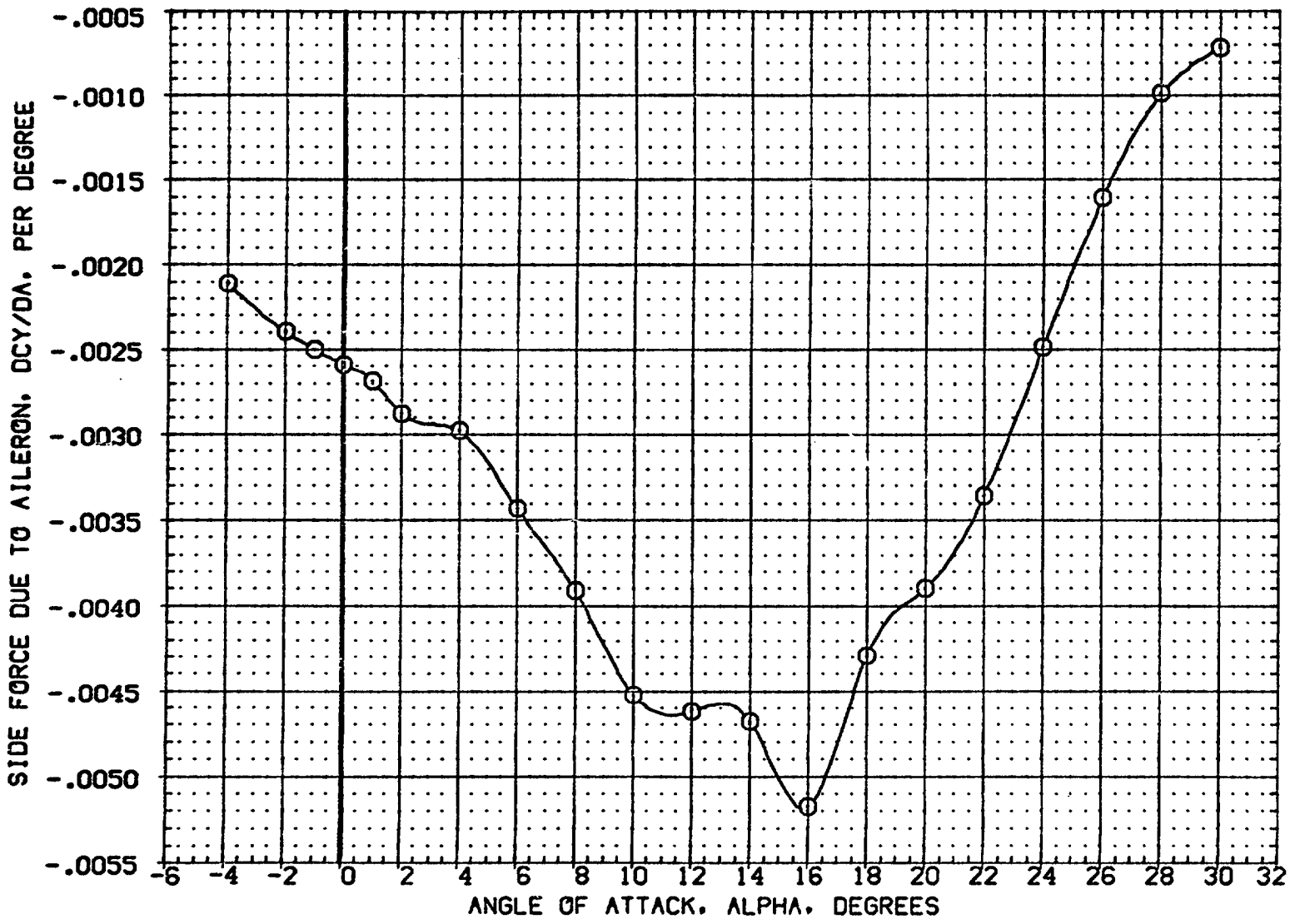


FIG 25 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES 2 OVERWING X=1060

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILRON	NACX/L	NACLIP	NACBTA
(RDU064) ○	0A71C B16C507J35F1V87 E18V3R3X10	10.000	.000	7.000	5.000
(RDU067) □	0A71C B16C507J35F1V87 E18V3R3X10	.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

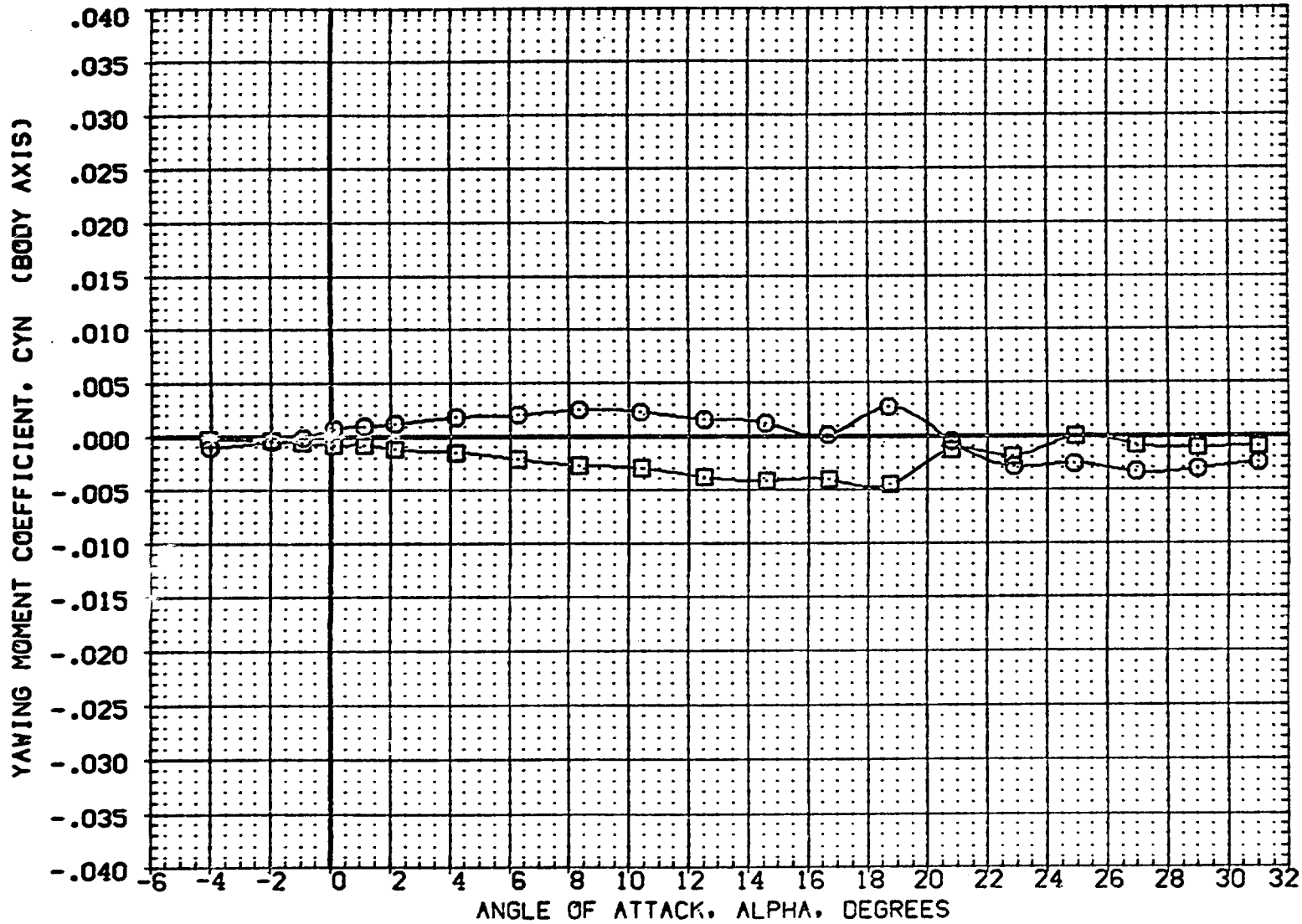


FIG 26 AILERONS DEFLECTED - CLUSTERED NACELLES 2 OVERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILRON	NACAVL	NACLIP	NACBTA
(RDU064)	DA7IC B16C507J35F1V87 E18V3R3X10	10.000	.000	7.000	5.000
(RDU067)	DA7IC B16C507J35F1V87 E18V3R3X10	.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

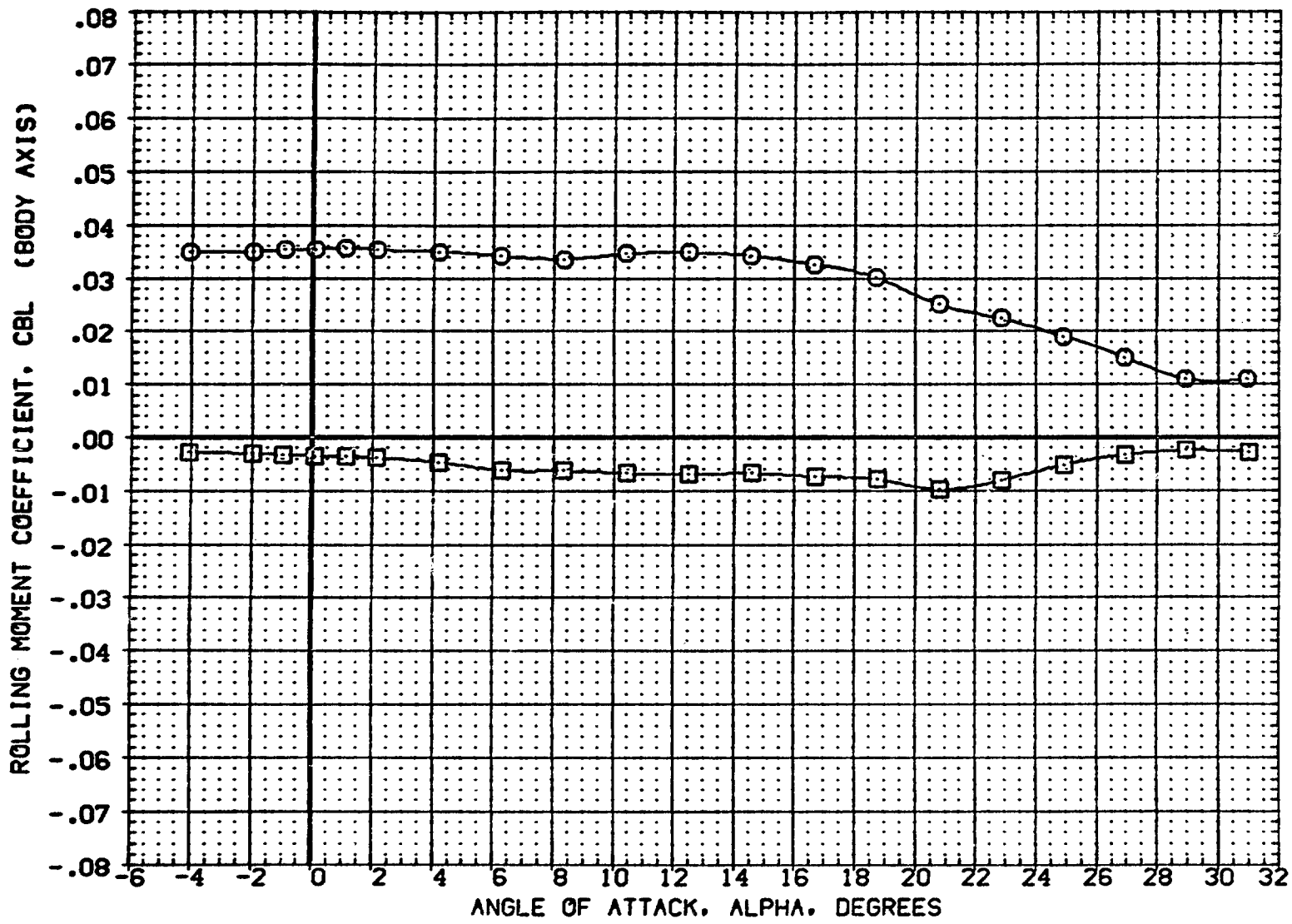


FIG 26 AILERONS DEFLECTED - CLUSTERED NACELLES 2 OVERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILRON	NACX/L	NACLIP	NACBTA
(RDU064) ○	0A71C B16C507J35F1V87 E18V3R3X10	10.000	.000	7.000	5.000
(RDU067) □	0A71C B16C507J35F1V87 E18V3R3X10	.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

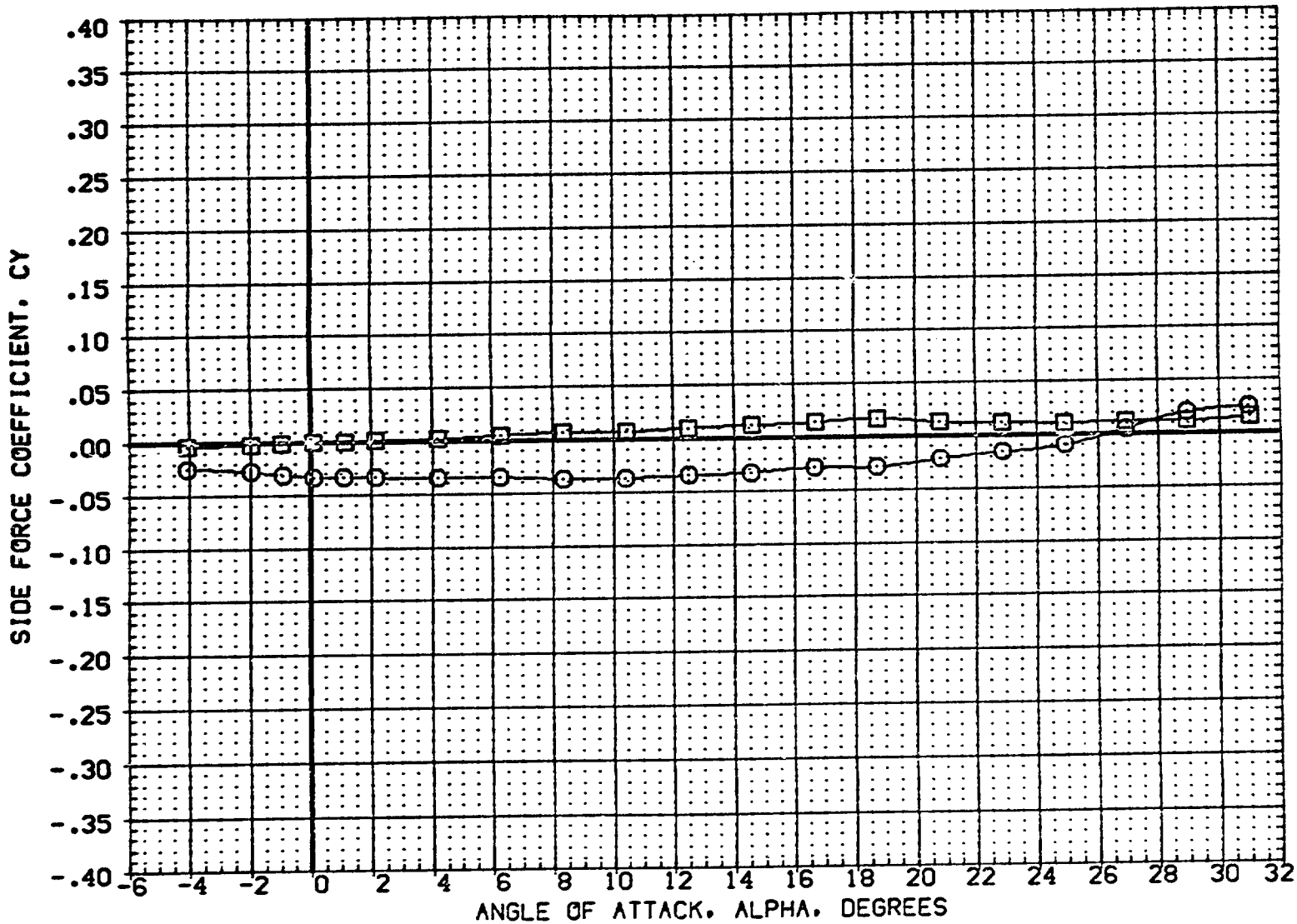


FIG 26 AILERONS DEFLECTED - CLUSTERED NACELLES 2 OVERWING XO = 950

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DALRON	NACX/L	BOFLAP	NACBTA
(FDU064) ○	CA71C B16CS07J35F1V87 E18V3R3X10	10.000	.000	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

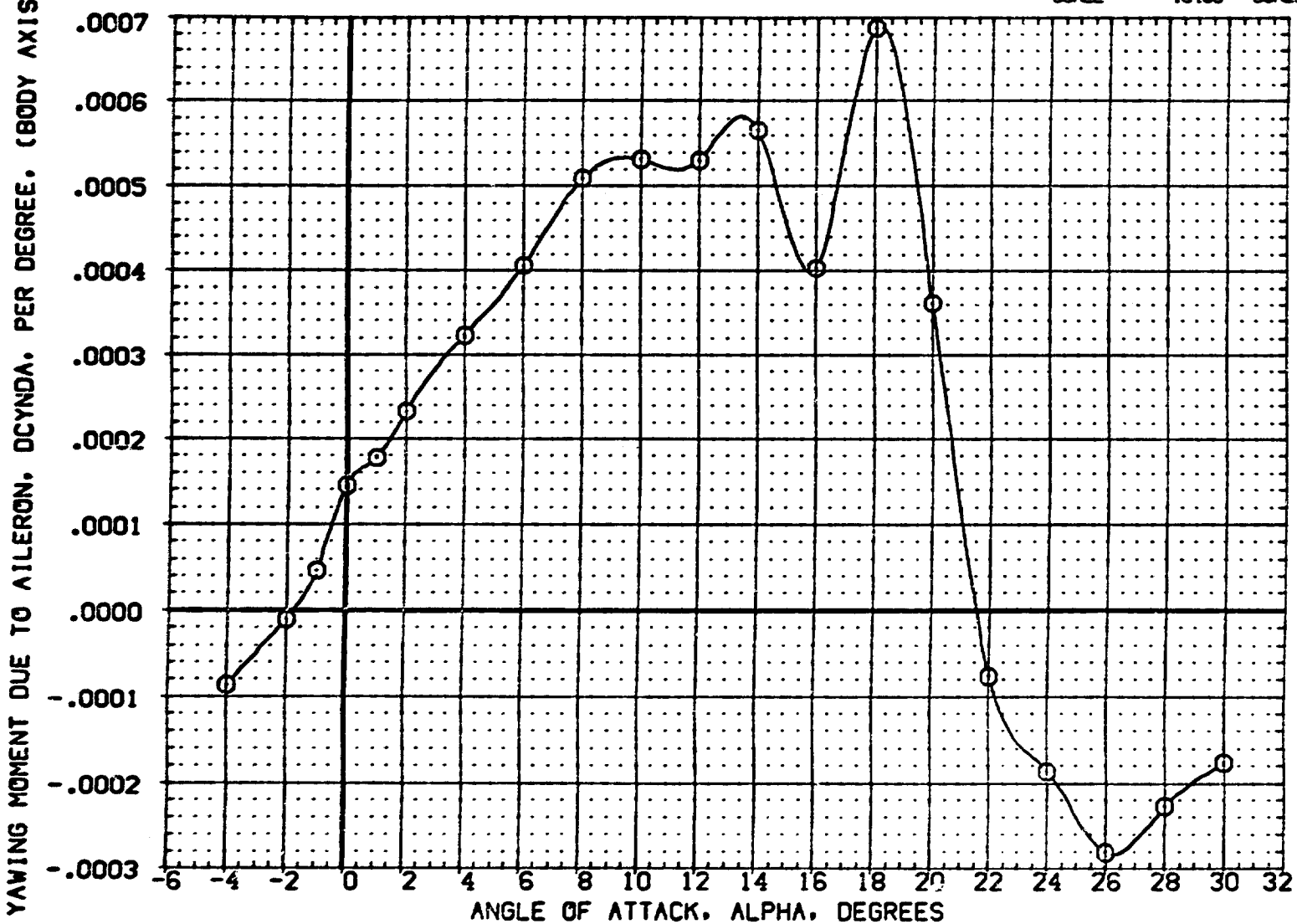


FIG 27 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES 2 OVERWING X= 950

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(FDU064) ○	0A71C B16C507J35F1V87 E18V3R3X10

DALRON	NACX/L	BOFLAP	NACBTA
10.000	.000	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

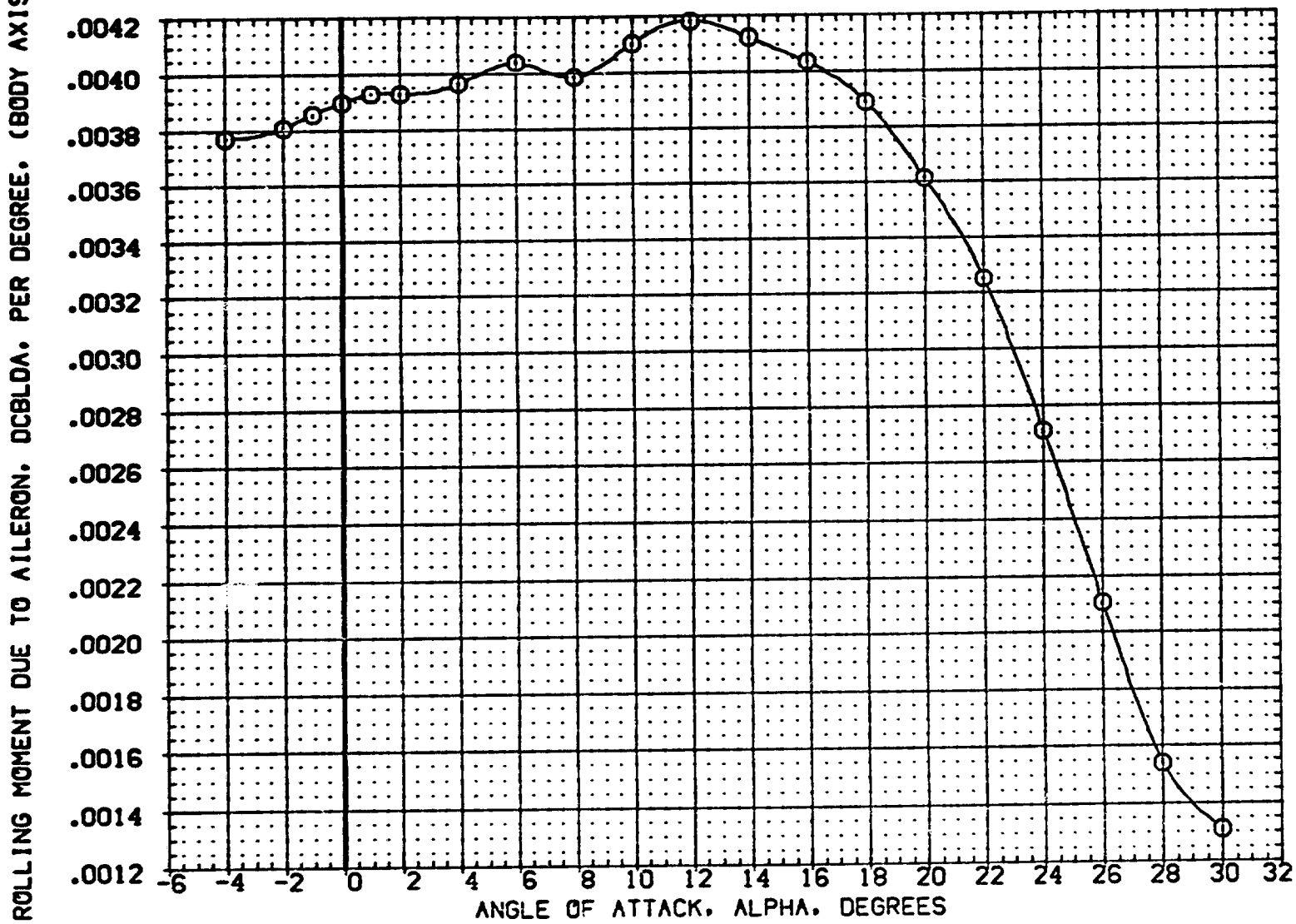


FIG 27 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES 2 OVERWING X= 950

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(FDU064) ○	DA71C B16C507J35F1V87 E18V3R3X10

DALRCN	NACX/L	BOFLAP	NACBTA
10.000	.000	-18.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

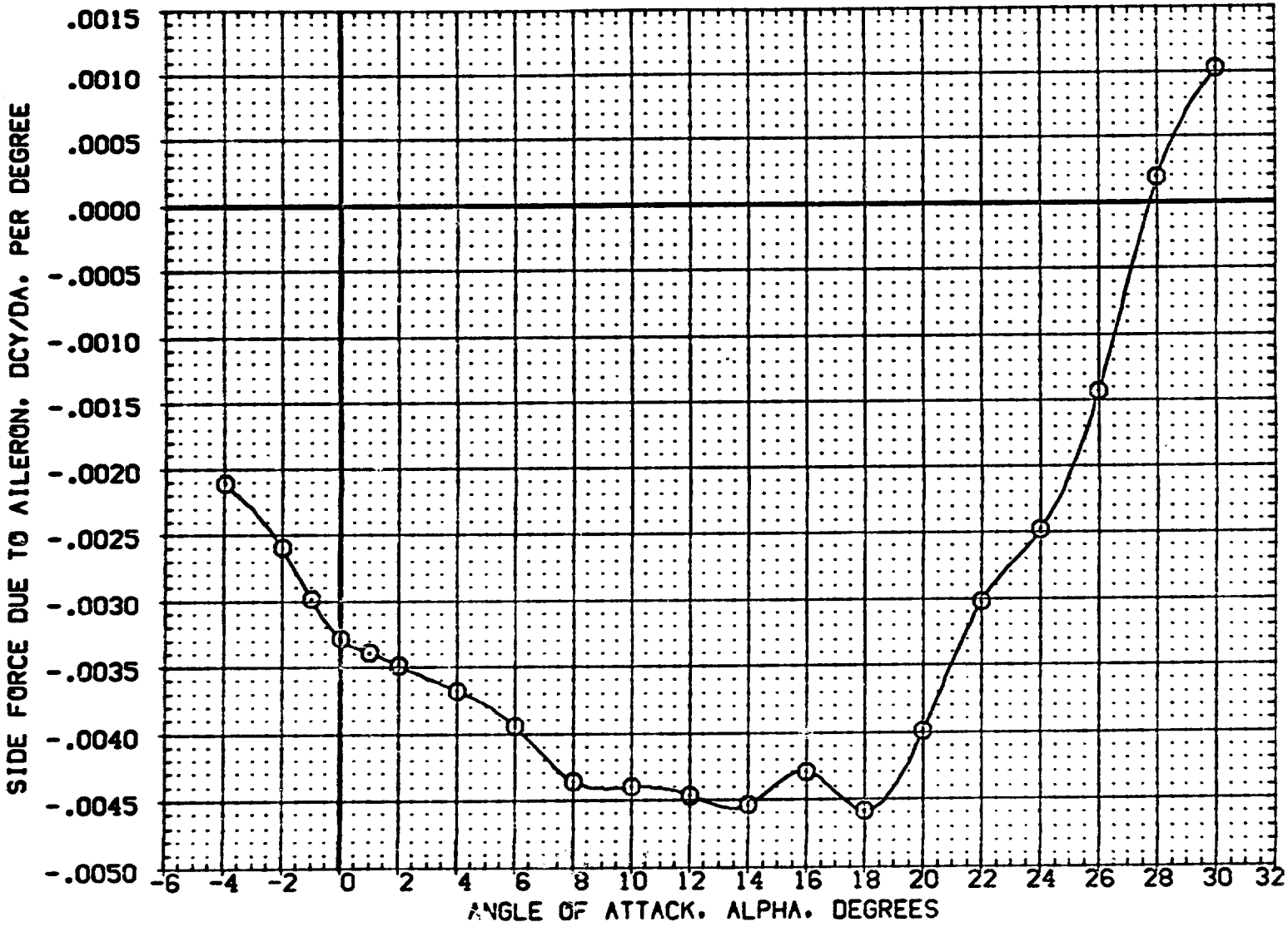


FIG 27 AILERON EFFECTIVENESS DERIVATIVES-CLUSTERED NACELLES 2 OVERWING X= 950

(A)MACH = .21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	AILRON	BDFLAP
(RDU002)	CA71C B16CSD7 F1V87 E18V3R3X9	.000	.000	.000	-18.000
(RDU003)	CA71C B16CSD7 F1V87 E18V3R3X9	10.000	.000	.000	-18.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

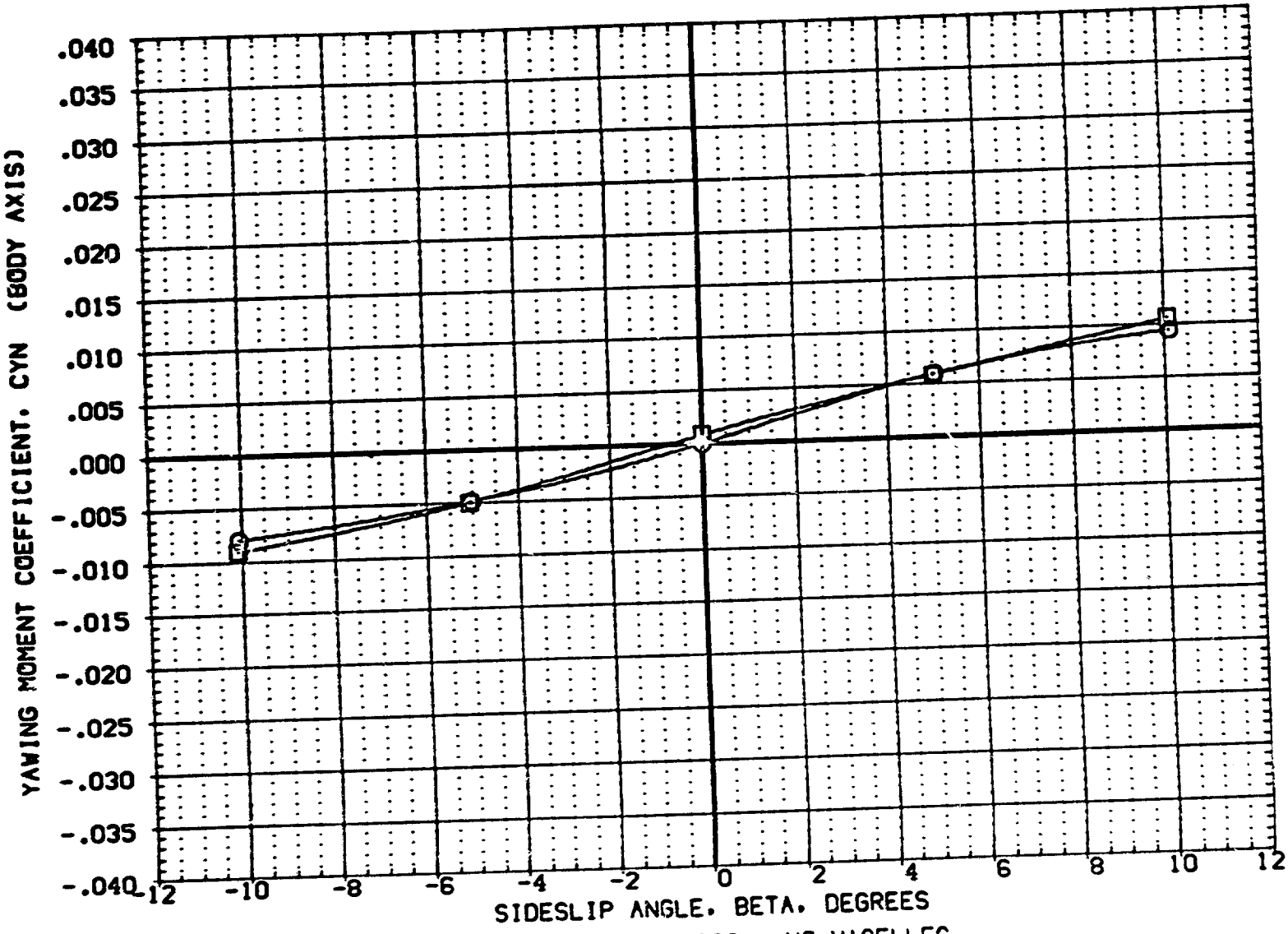


FIG 28 LATERAL/DIRECTIONAL CHARACTERISTICS - NO NACELLES

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	AILRON	BDFLAP
(RDU002)	8	CA71C B16C507 F1V87 E18V3R3X9	.000	.000	.000	-18.000
(RDU003)	□	CA71C B16C507 F1V87 E18V3R3X9	10.000	.000	.000	-18.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

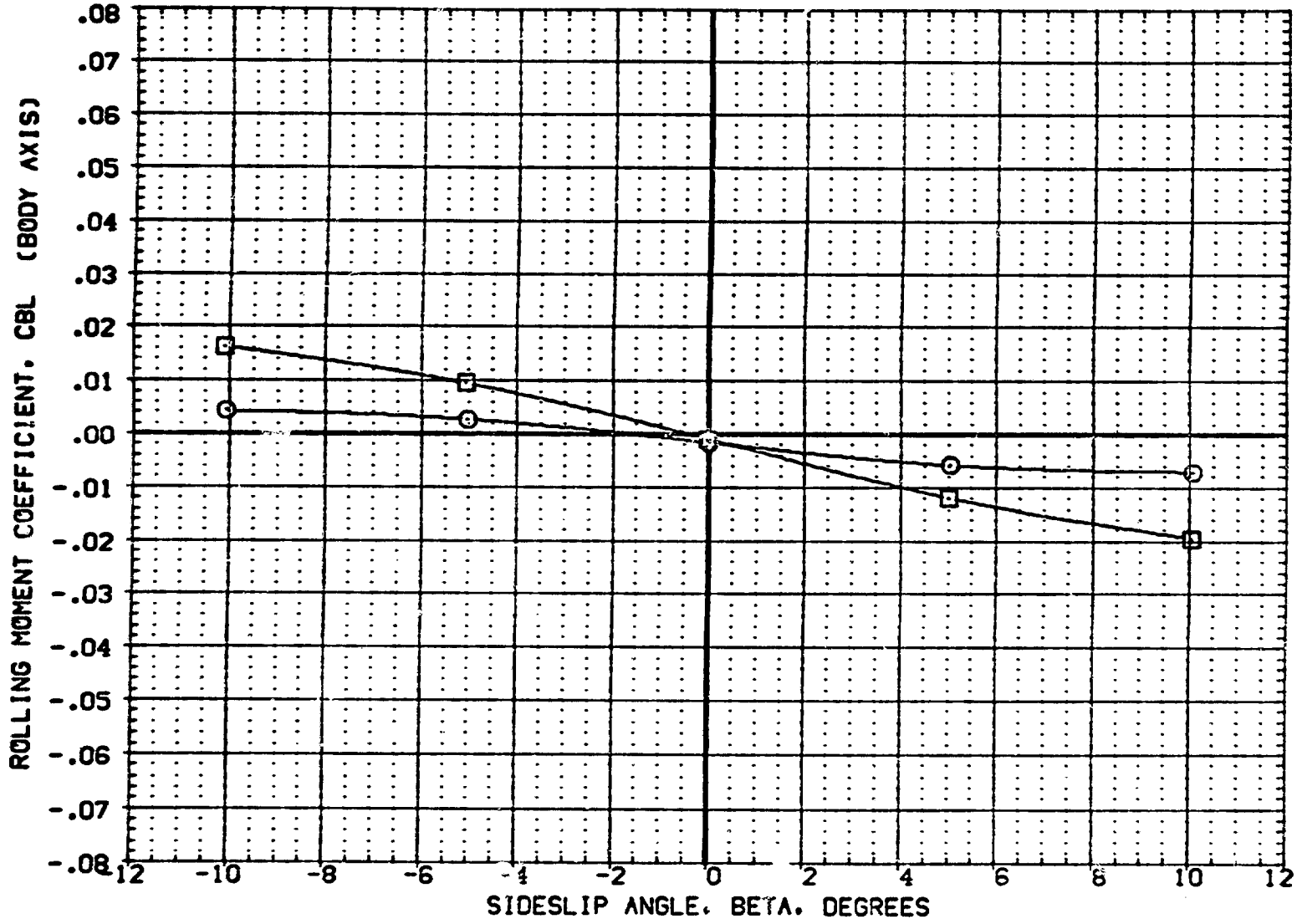


FIG 28 LATERAL/DIRECTIONAL CHARACTERISTICS - NO NACELLES

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION			
(RDU002) ○	DA71C	B16CSD7	F1W87	E18V3R3X9
(RDU003) □	DA71C	B16CSD7	F1W87	E18V3R3X9

ALPHA	ELEVON	AILRON	BOFLAP
.000	.000	.000	-18.000
10.000	.000	.000	-18.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

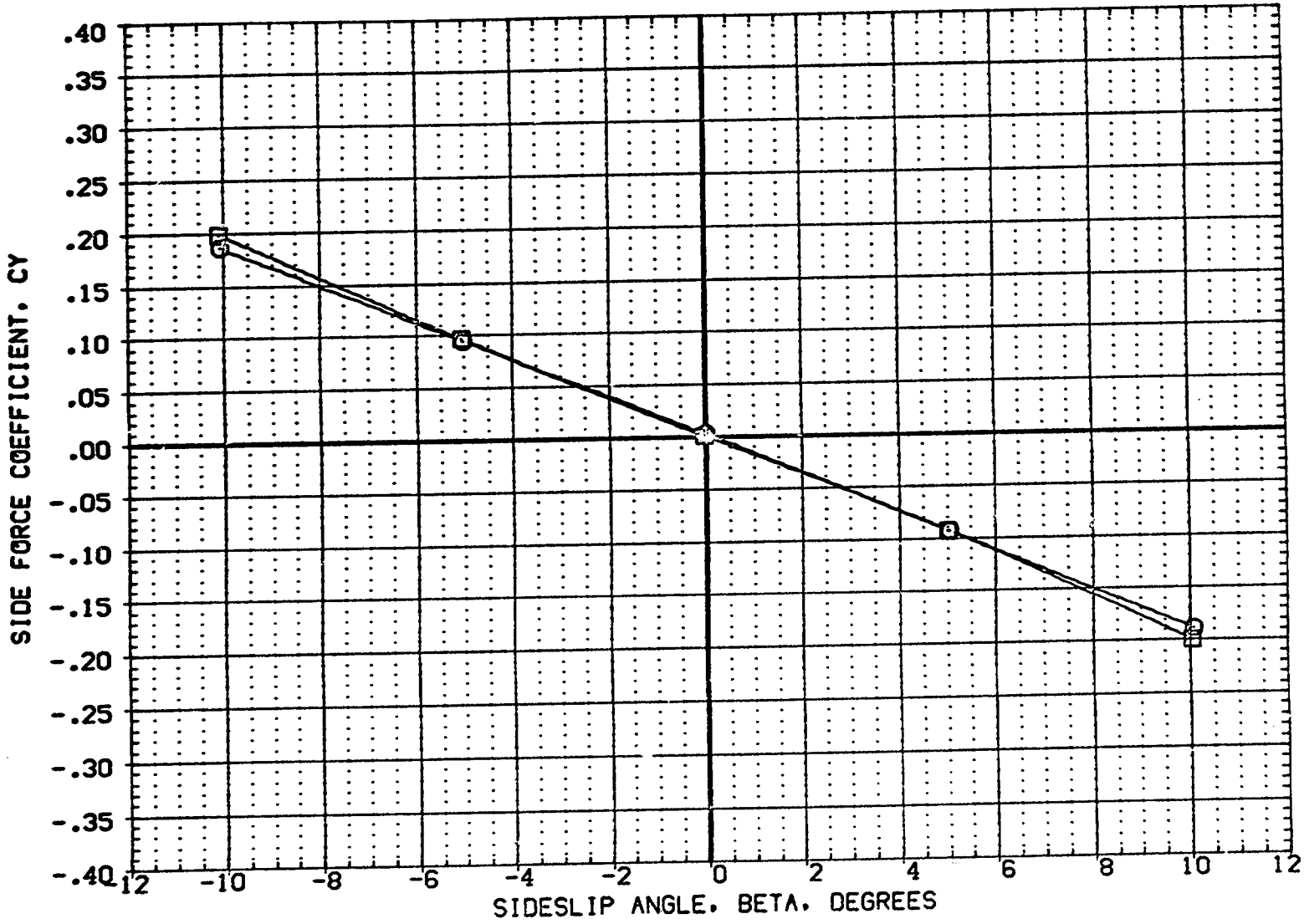


FIG 28 LATERAL/DIRECTIONAL CHARACTERISTICS - NO NACELLES

(A)MACH = .20

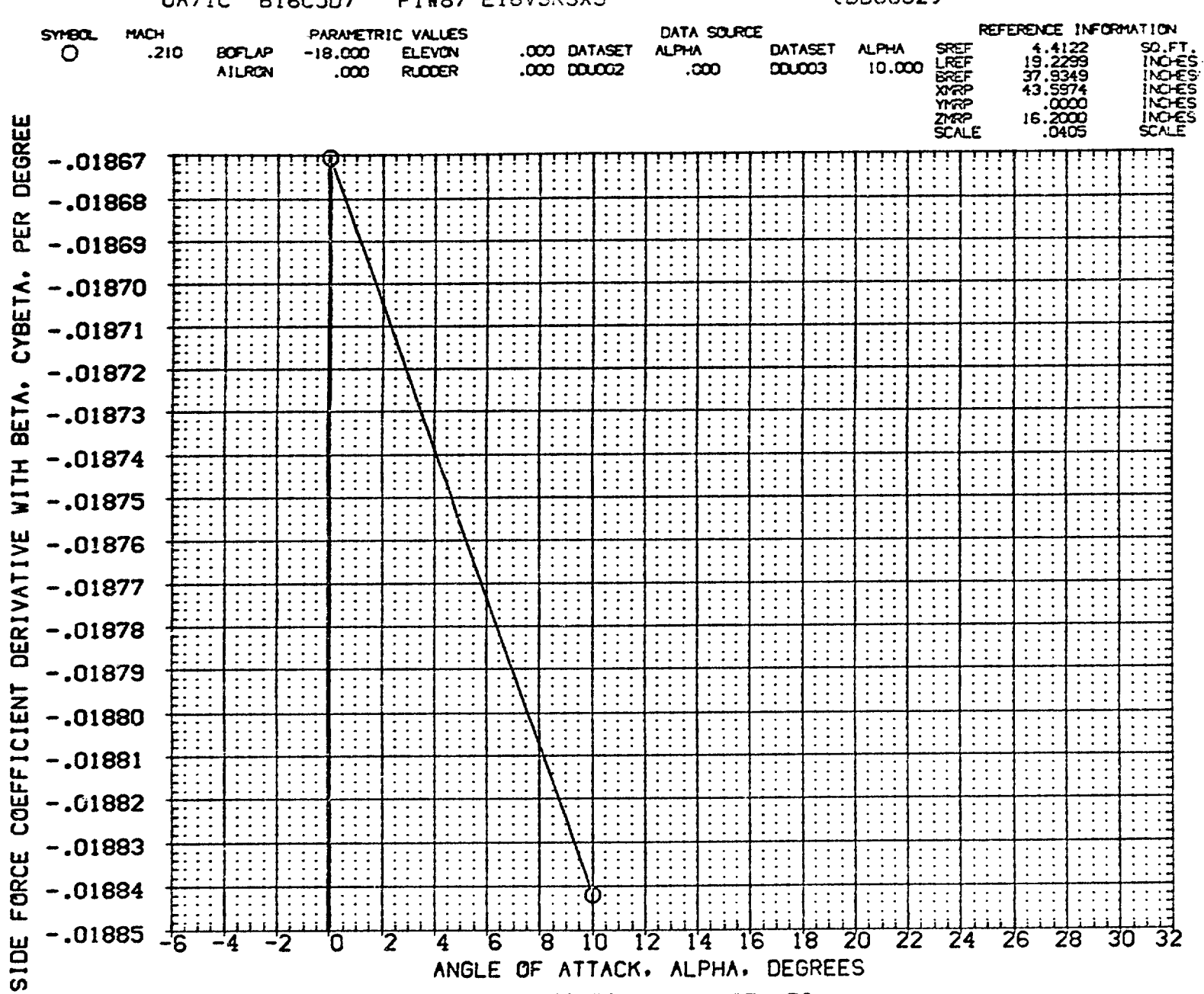


FIG 29 LATERAL/DIRECTIONAL DERIVATIVES - NO NACELLES

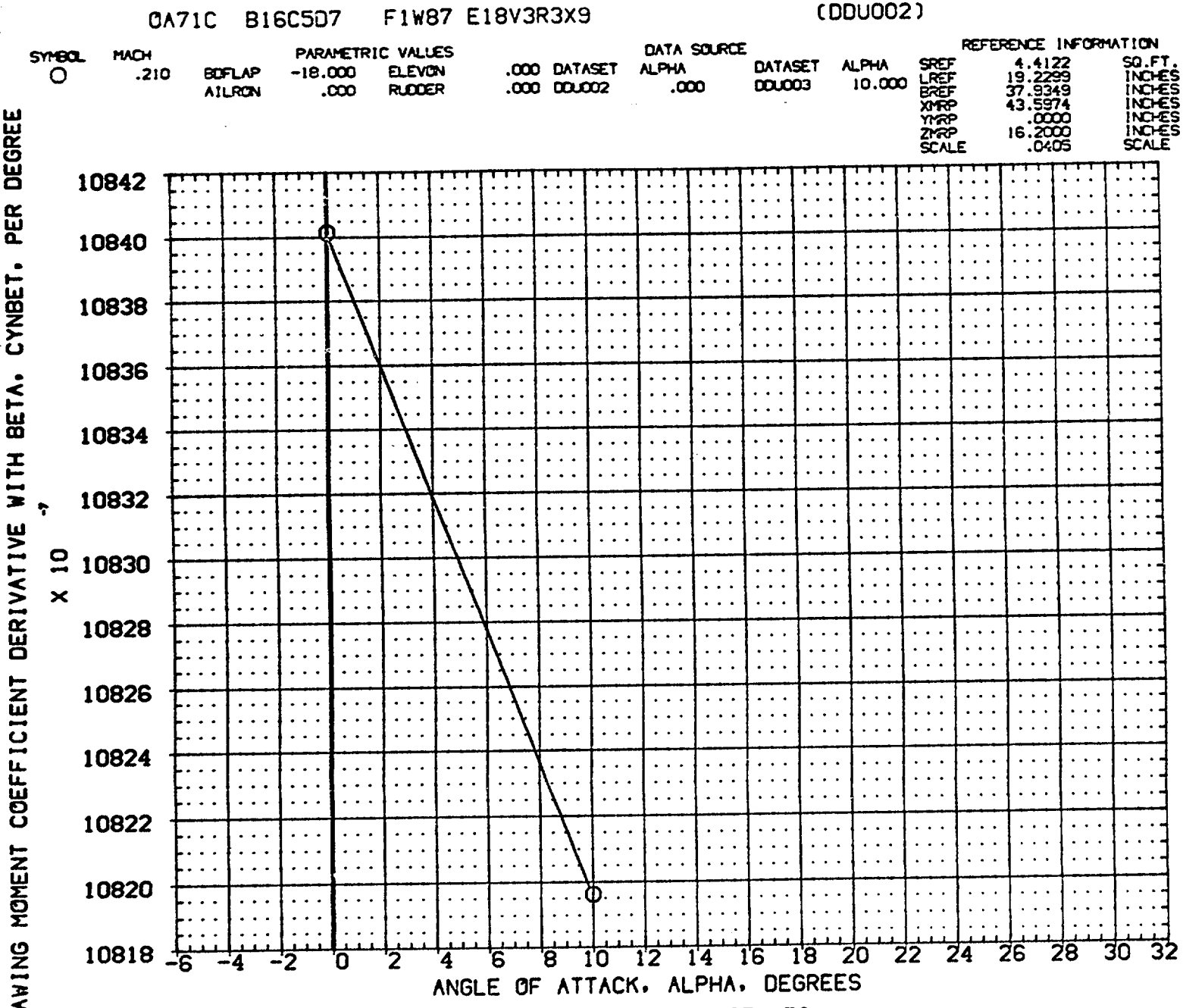


FIG 29 LATERAL/DIRECTIONAL DERIVATIVES - NO NACELLES

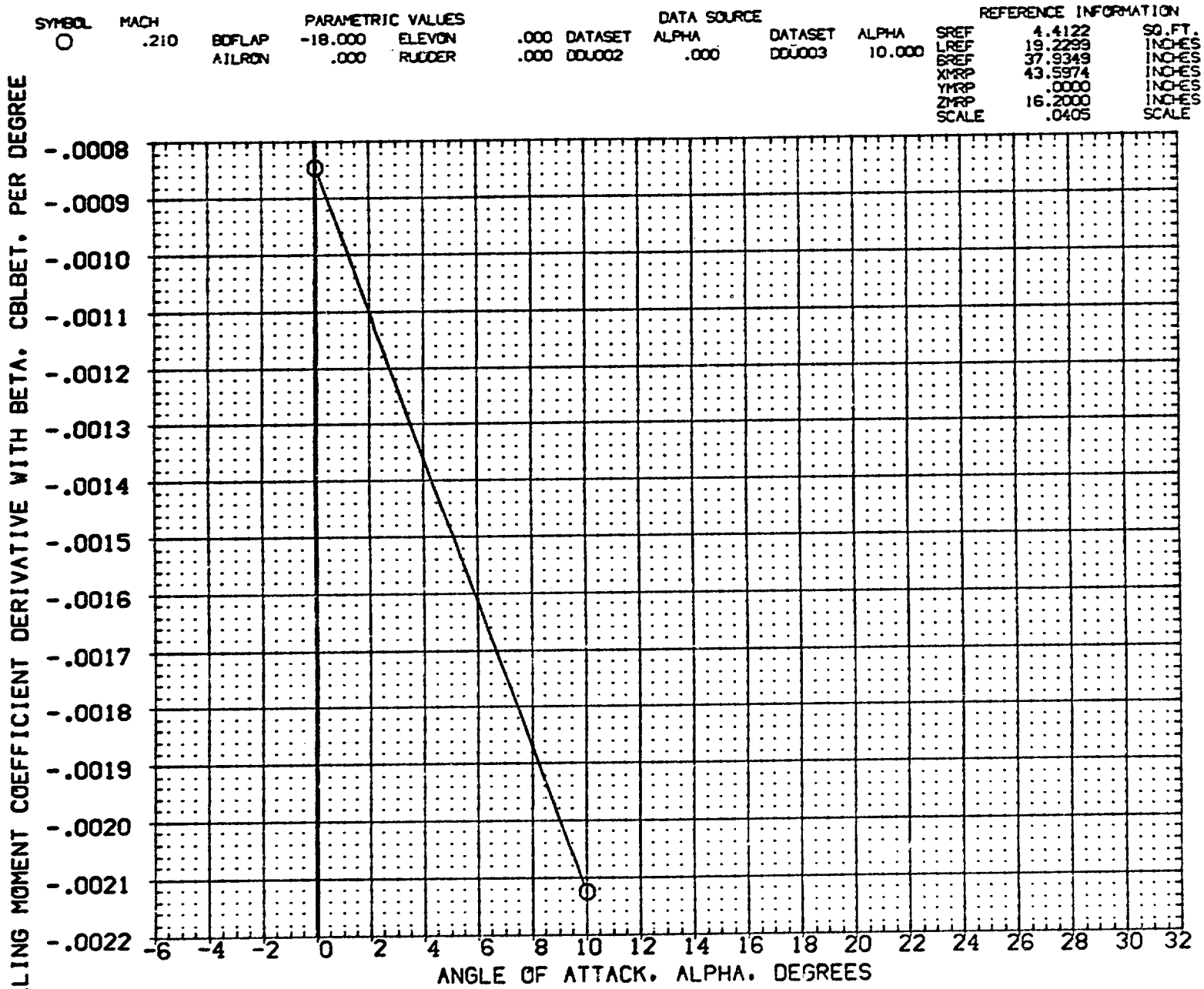


FIG 29 LATERAL/DIRECTIONAL DERIVATIVES - NO NACELLES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	NACX/L	NACLIP	NACBTA
(RQU068)	CA71C B16CSD7J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(RQU069)	CA71C B16CSD7J35F1V87 E18V3R3X10	10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

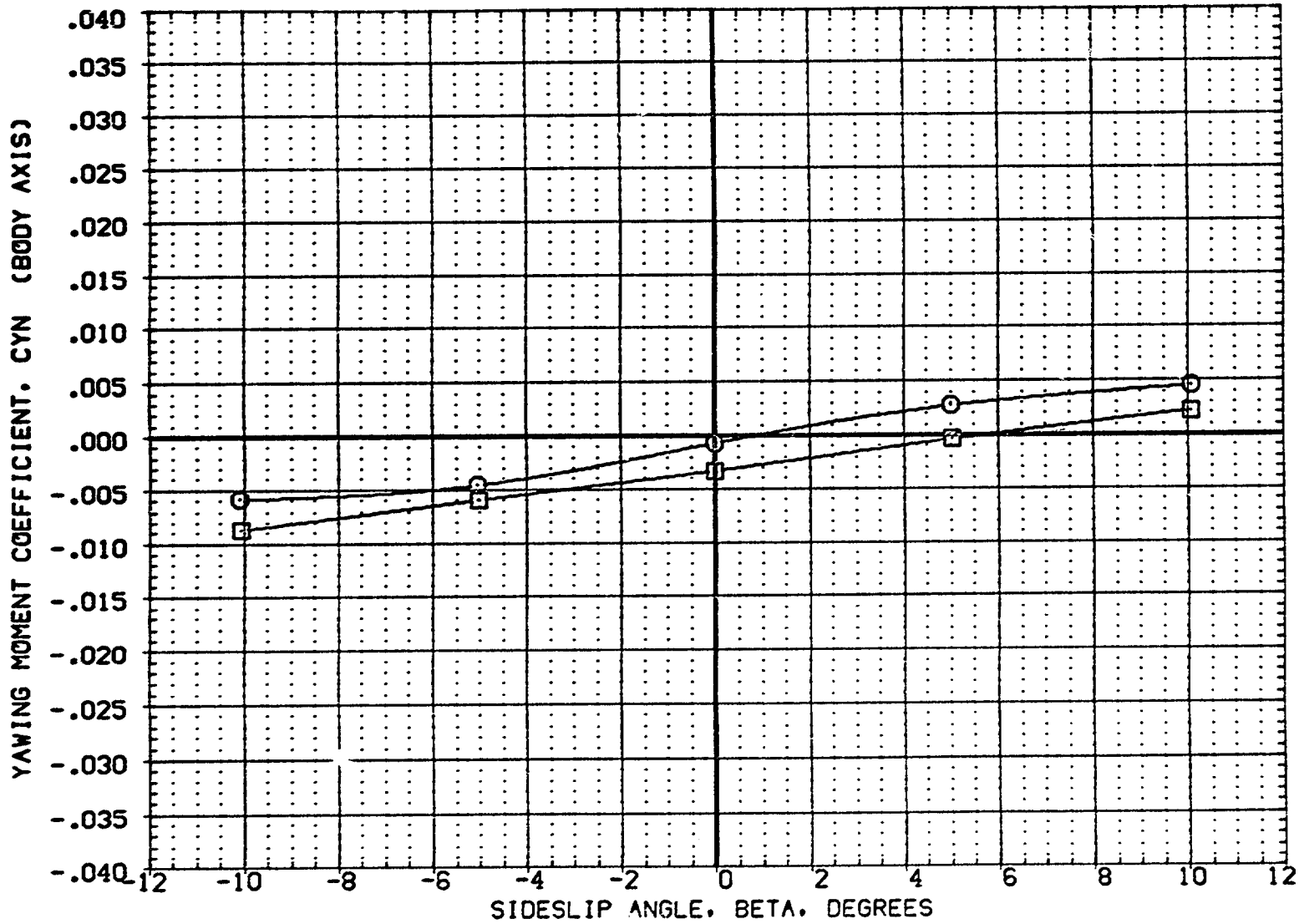


FIG 30 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	NACX/L	NACLIP	NACBTA
(RDU068)	○	0A71C B16C5D7J3SF1V87 E18V3R3X10	.000	.000	7.000	5.000
(RDU069)	□	0A71C B16C5D7J3SF1V87 E18V3R3X10	10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

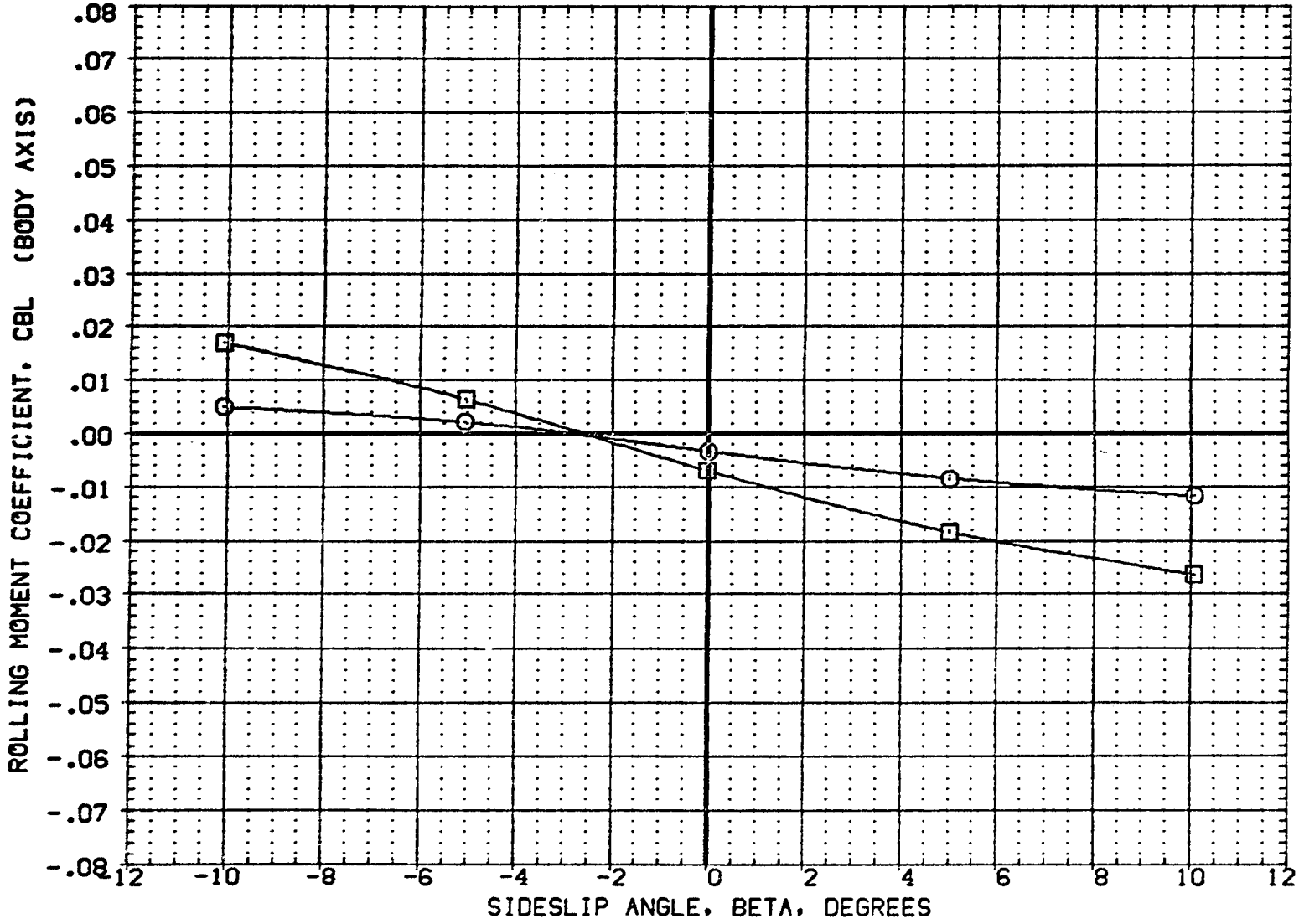


FIG 30 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	NACX/L	NACLIP	NACBTA
(RQUO68)	☐	CA71C B16CSD7J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(RQUO69)	☐	CA71C B16CSD7J35F1V87 E18V3R3X10	10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

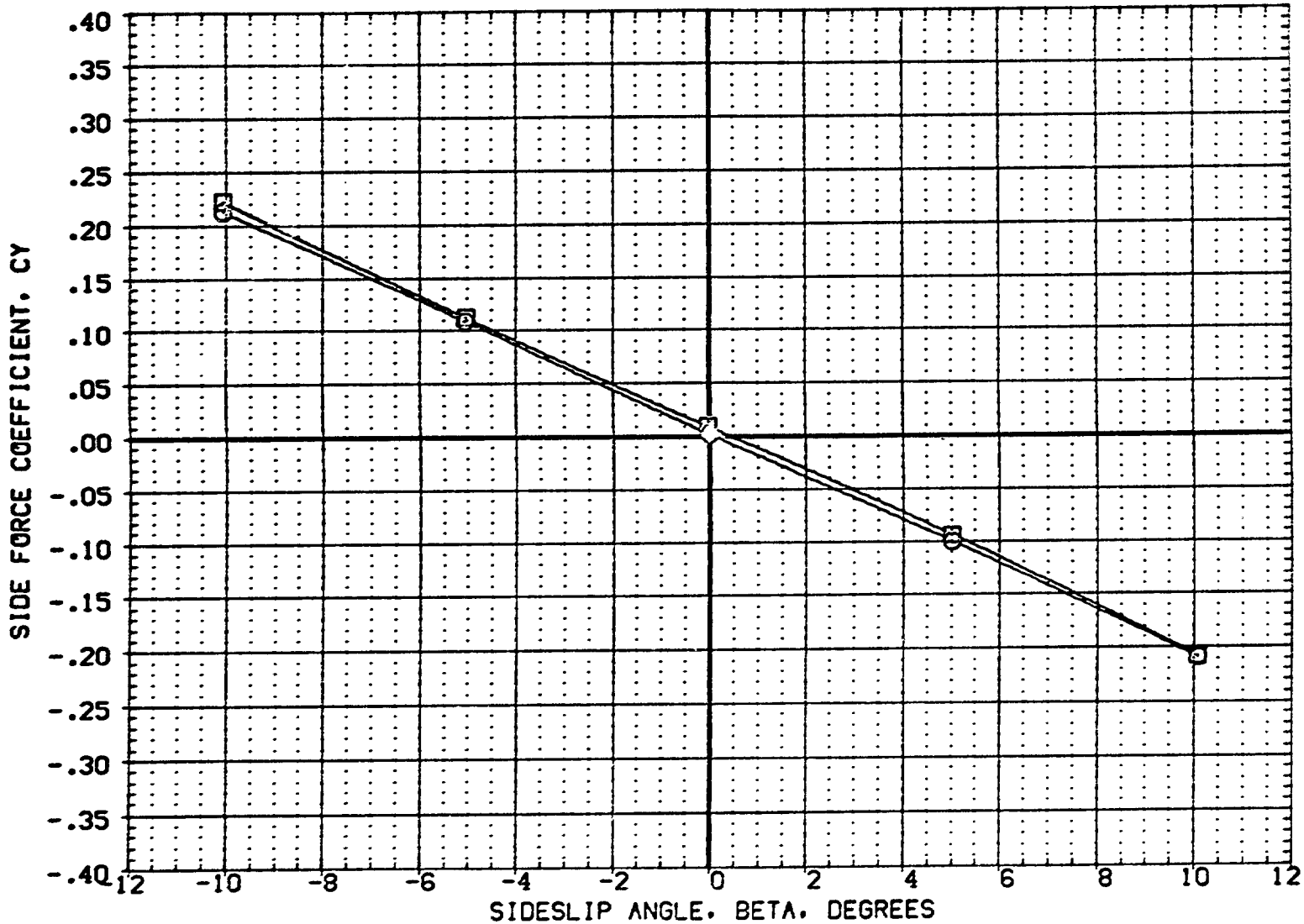


FIG 30 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES UNDERWING XO= 950

(A)MACH = .20

0A71C B16C5D7J35F1W87 E18V3R3X10 (DDU068)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	.210	BOFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU068	.000	DDU069	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.000					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

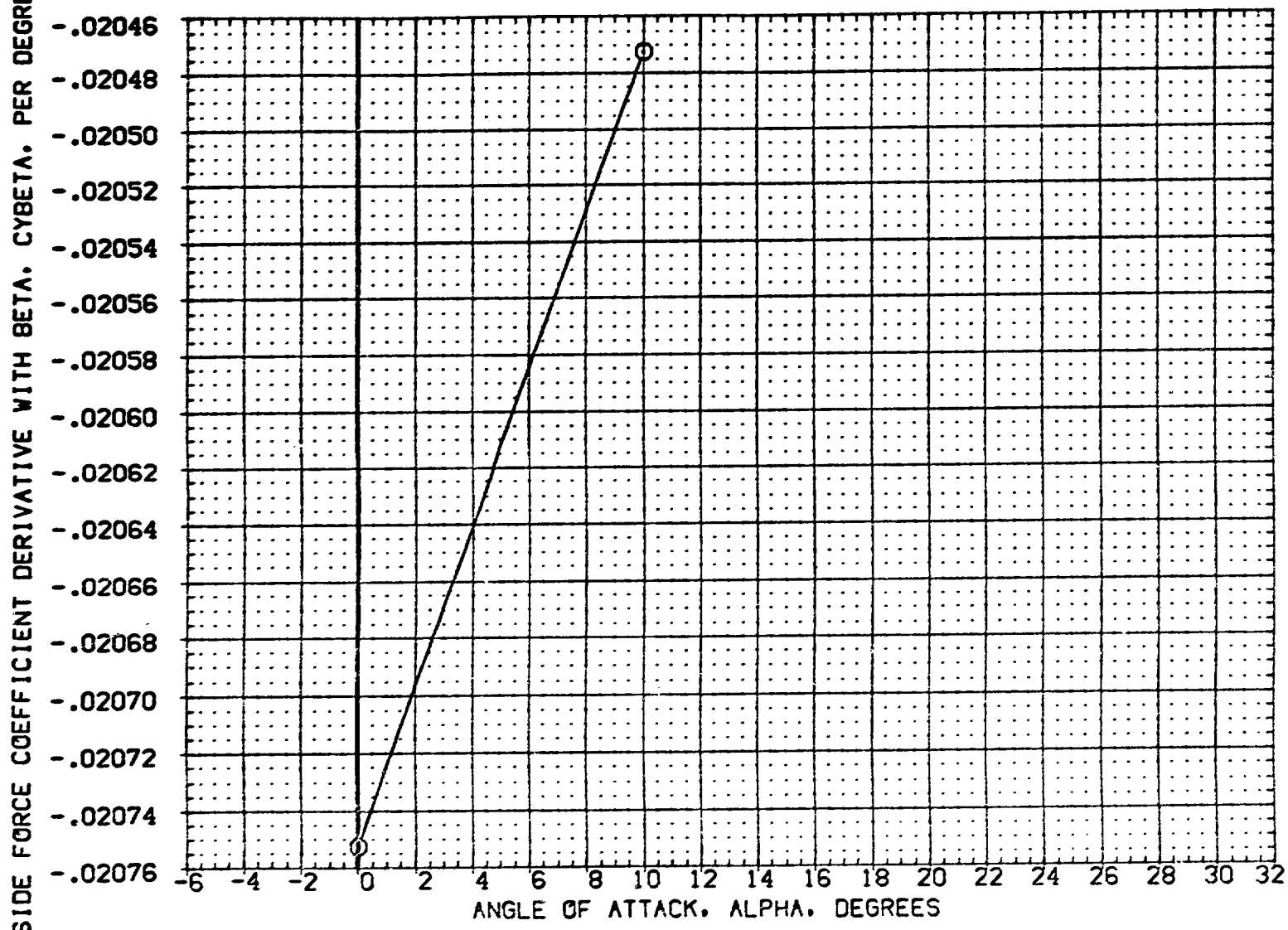


FIG 31 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES UNDERWING XO= 950

0A71C B16C5D7J35F1W87 E18V3R3X10 (DDU068)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	.210	RDFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU068	.000	DDU069	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.000					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

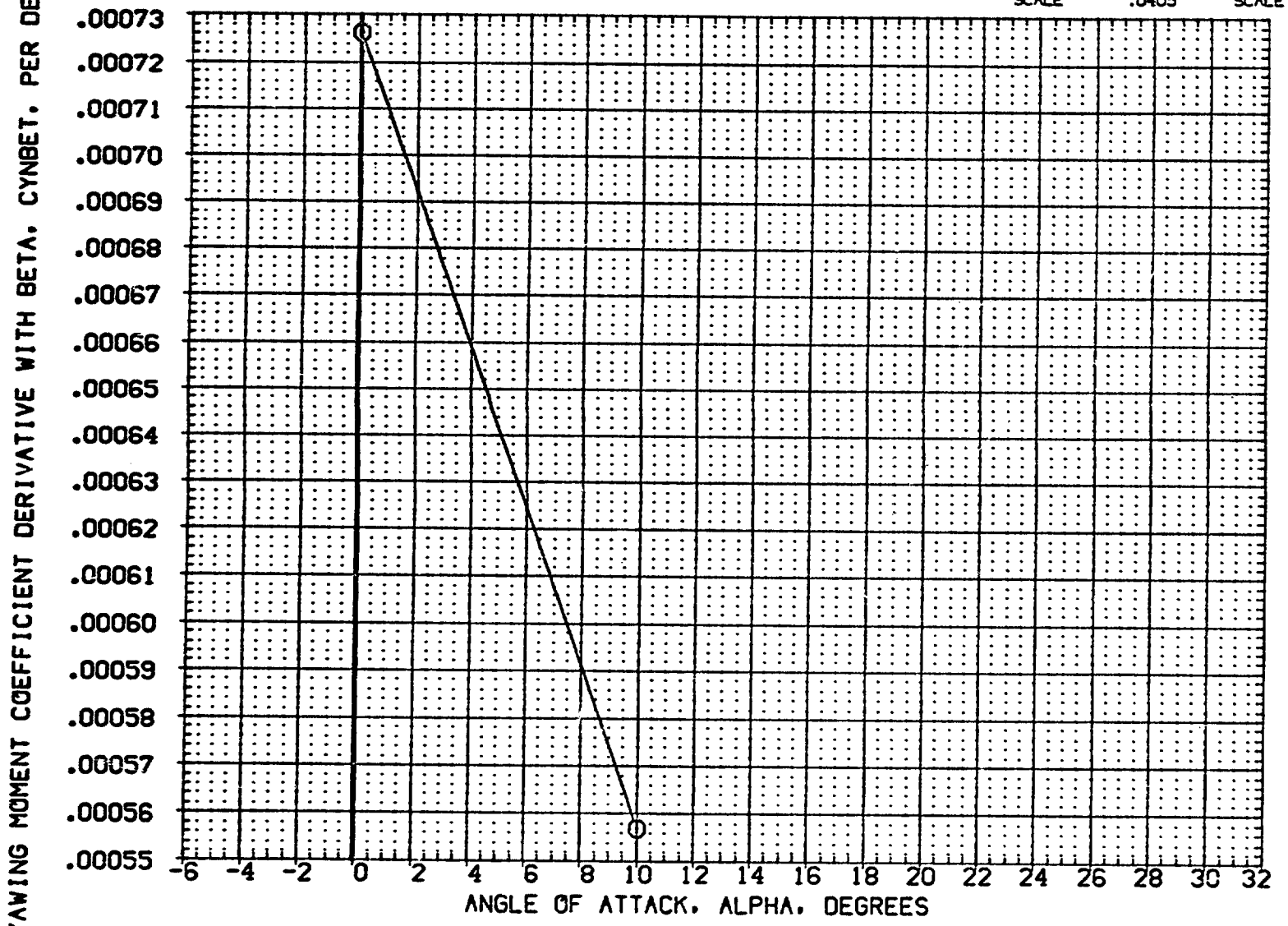


FIG 31 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES UNDERWING XO= 950

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	.210	BOFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU068	.000	DDU069	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.000					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

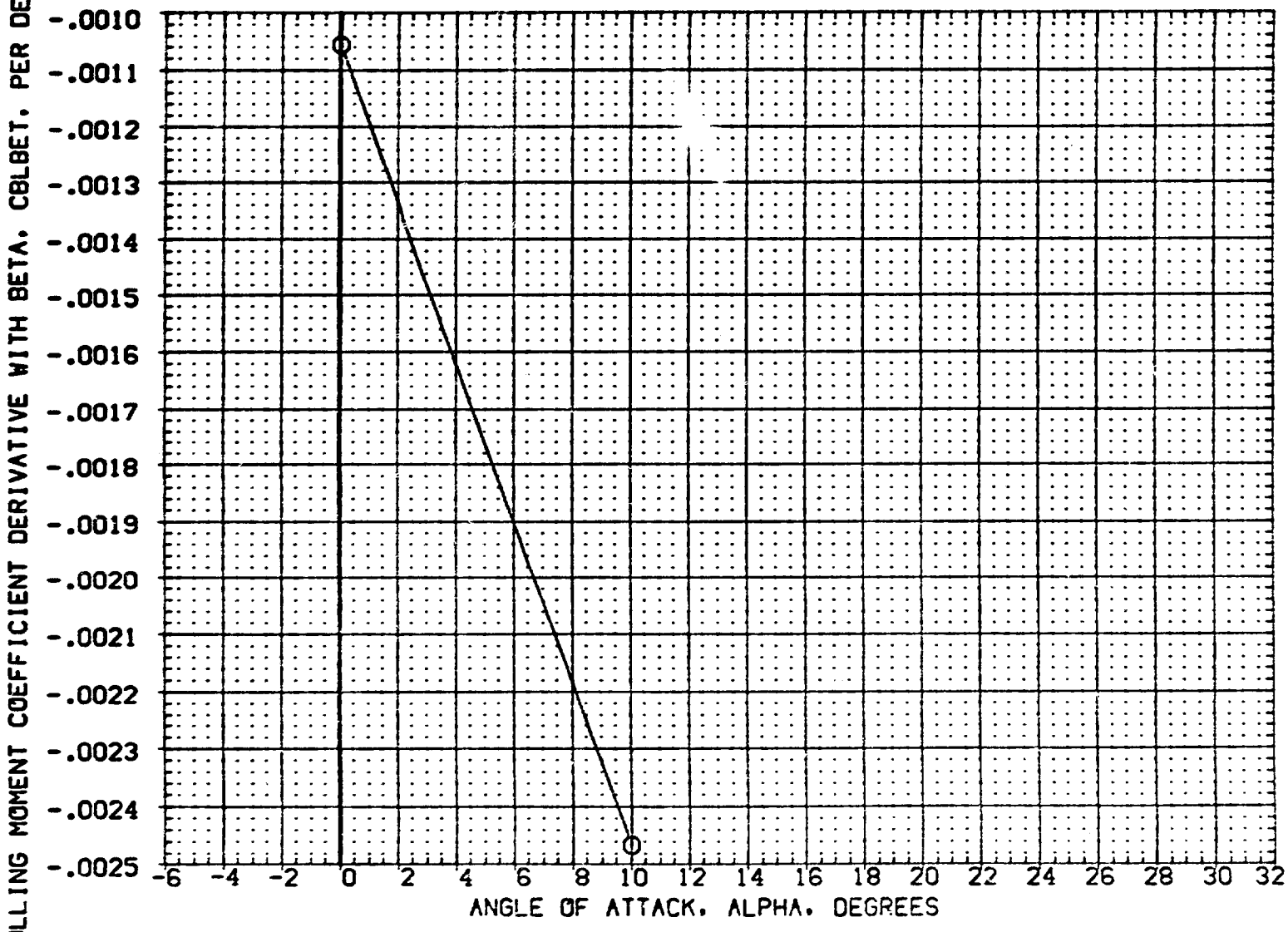


FIG 31 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES UNDERWING XO= 950

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RDL047)	CA71C B16C507J34F1V87 E18V3R3X10
(RDL048)	CA71C B16C507J34F1V27 E18V3R3X10

ALPHA	NACX/L	NACLIP	NACBTA
.000	.270	7.000	5.000
10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

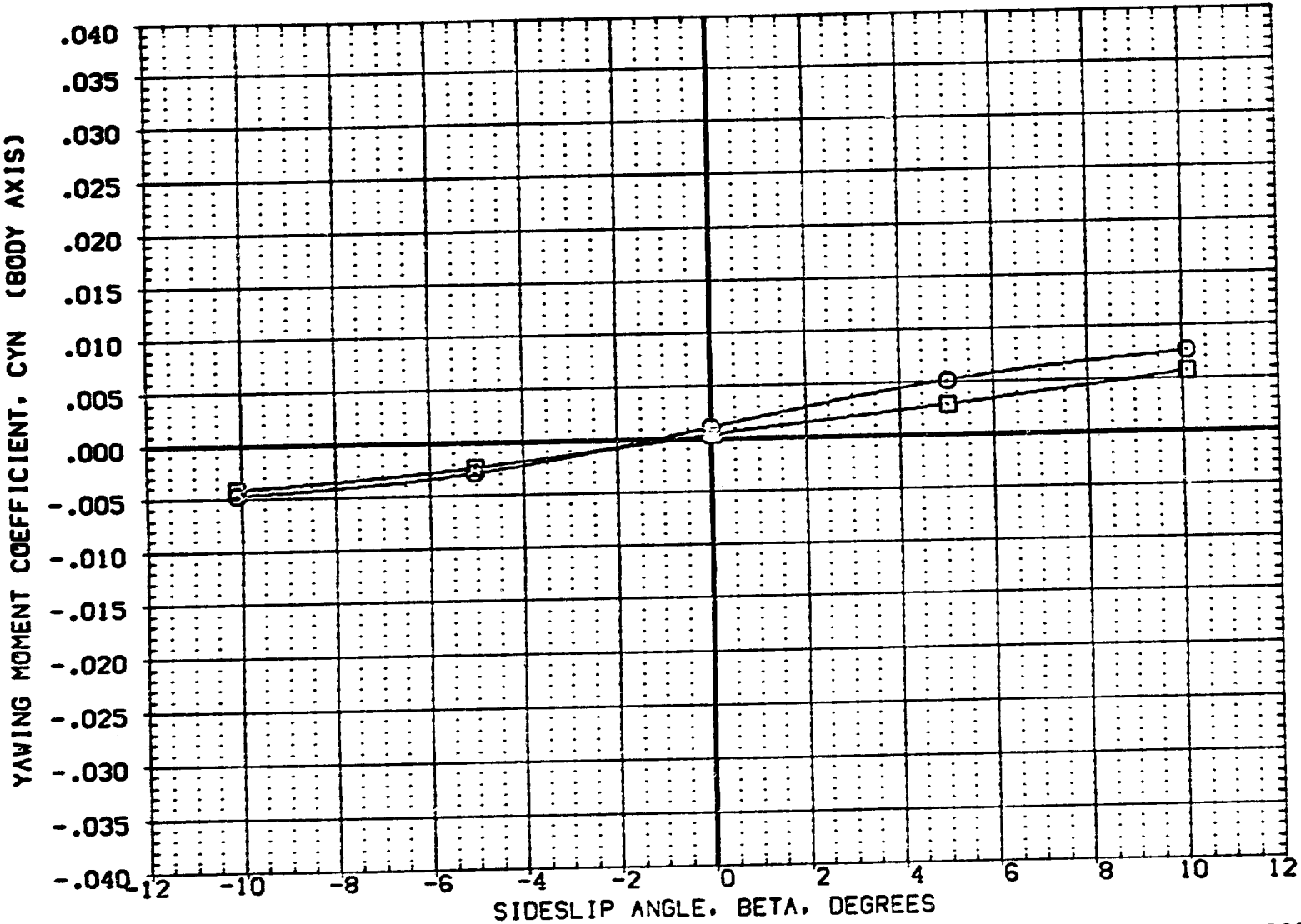


FIG 32 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES UNDERWING XO=1005

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(RDU047)	○	DA71C B16CSD7J34F1V87 E18V3R3X10
(RDU048)	□	DA71C B16CSD7J34F1V87 E18V3R3X10

ALPHA	NACX/L	NACLIP	NACBTA
.000	.270	7.000	5.000
10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

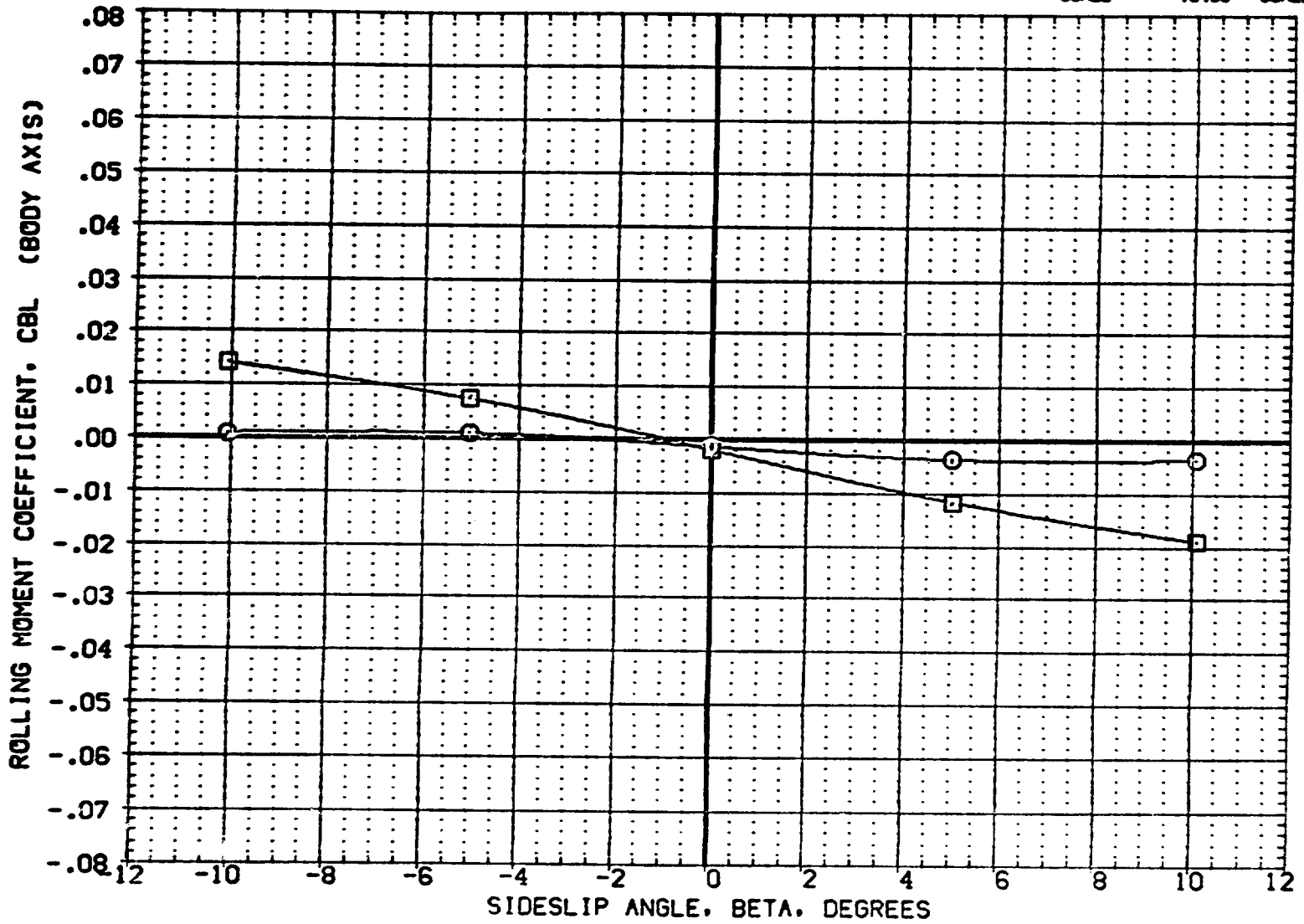


FIG 32 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES UNDERWING XO=1005

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ROUC47)	DA71C B16CSD7J34F1V87 E18V3R3X10
(ROUC48)	DA71C B16CSD7J34F1V87 E18V3R3X10

ALPHA	NACX/L	NACLIP	NACBTA
.000	.270	7.000	5.000
10.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

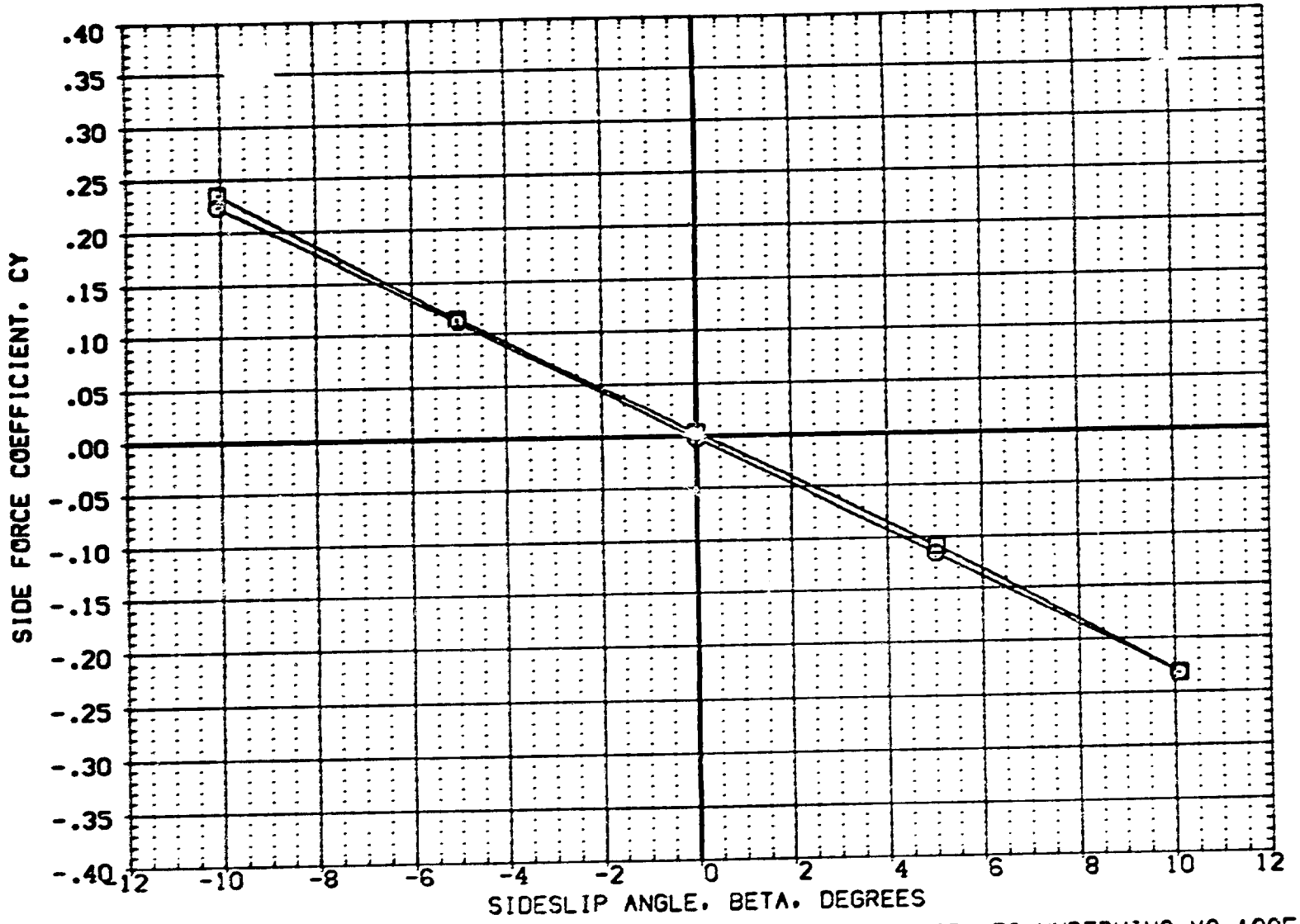


FIG 32 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES UNDERWING XO=1005

(A)MACH = .20

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	.210	BOFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU047	.000	DDU048	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.270					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

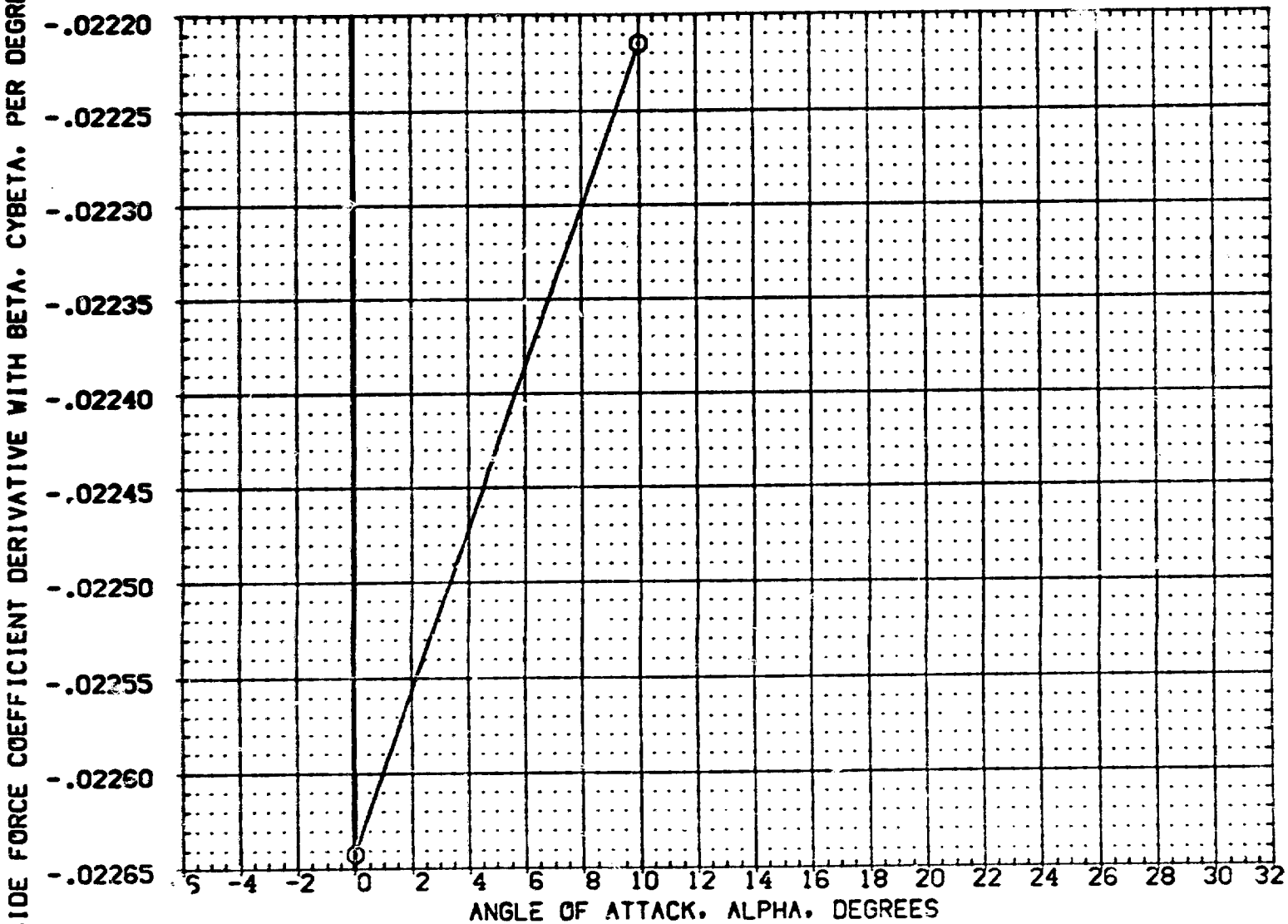


FIG 33 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES UNDERWING XO=1005

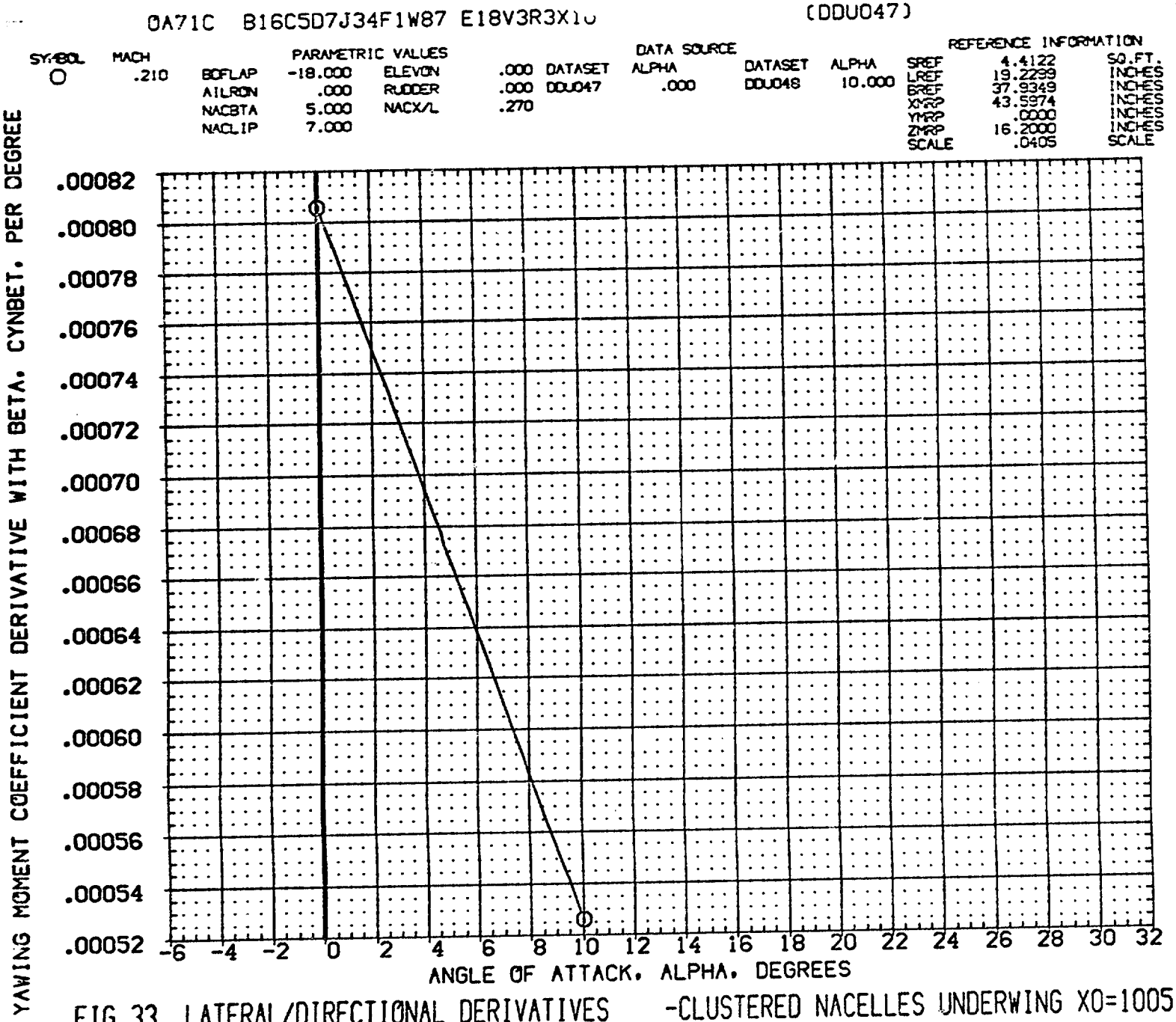


FIG 33 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES UNDERWING XO=1005

0A71C B16C5D7J34F1W87 E18V3R3X10 (DDU047)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	.210	BDFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU047	.000	DDU048	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.270					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

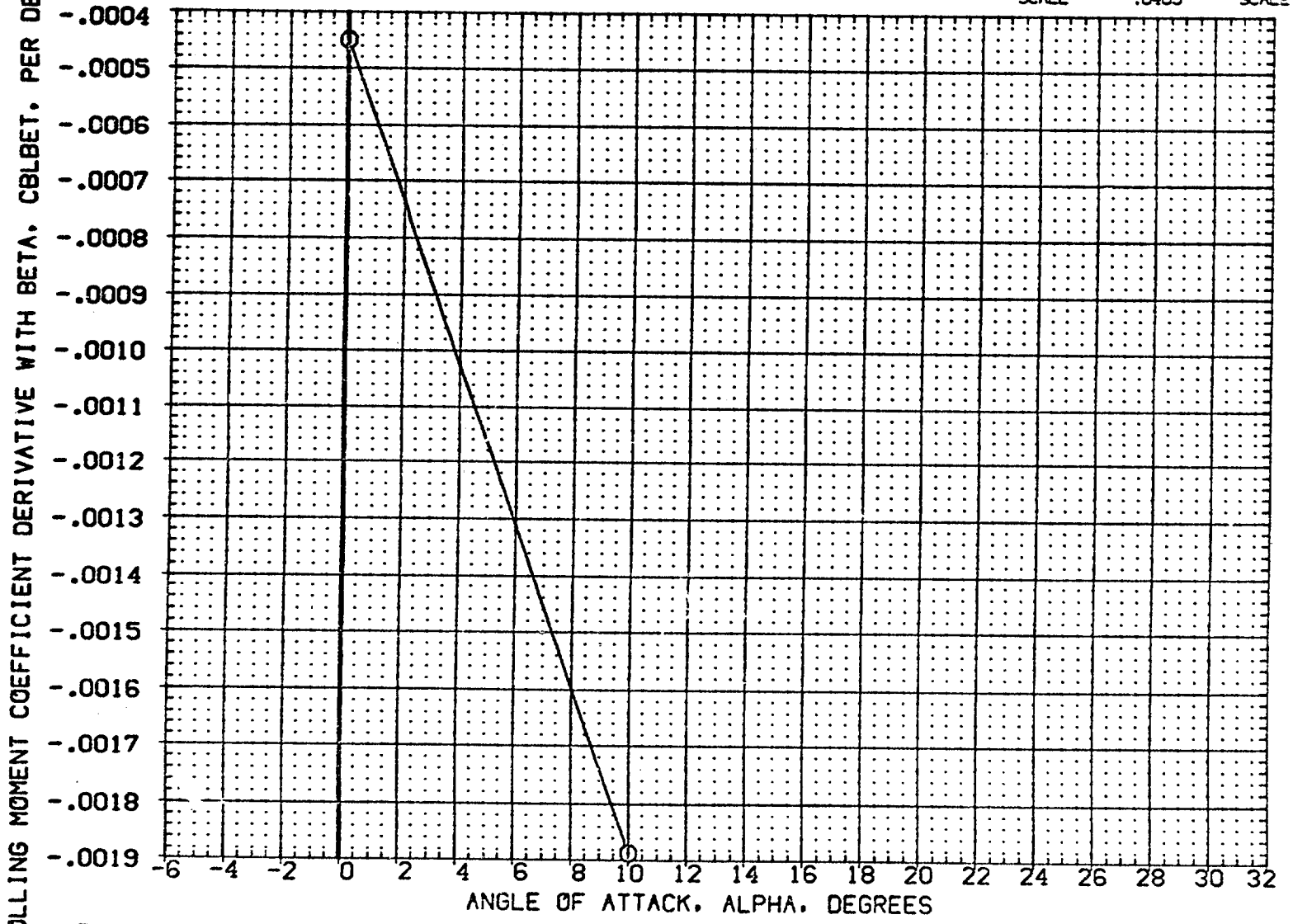


FIG 33 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES UNDERWING XO=1005

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	NACX/L	NACLIP	NACBTA
(RDU050) ○	OA71C B16C5D7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000
(RDU051) □	OA71C B16C5D7J34F1V87 E18V3R3X10	10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

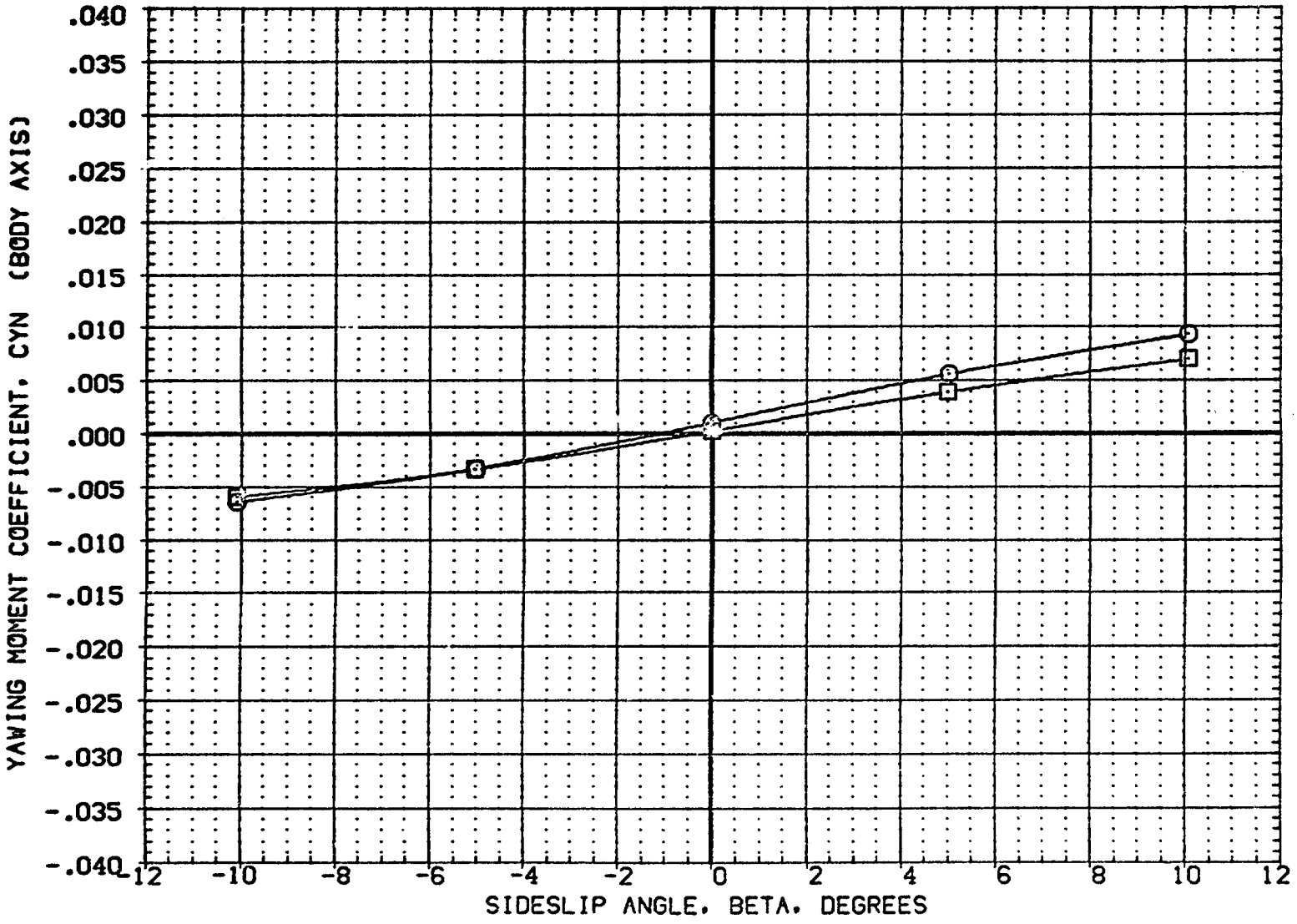


FIG 34 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES UNDERWING XO=1060

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	NACX/L	NACLIP	NACBTA
(RDUC50) ○	DA71C B16C507J34F1V87 E18V3R3X10	.000	.530	7.000	5.000
(RDUC51) □	DA71C B16C507J34F1V87 E18V3R3X10	10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

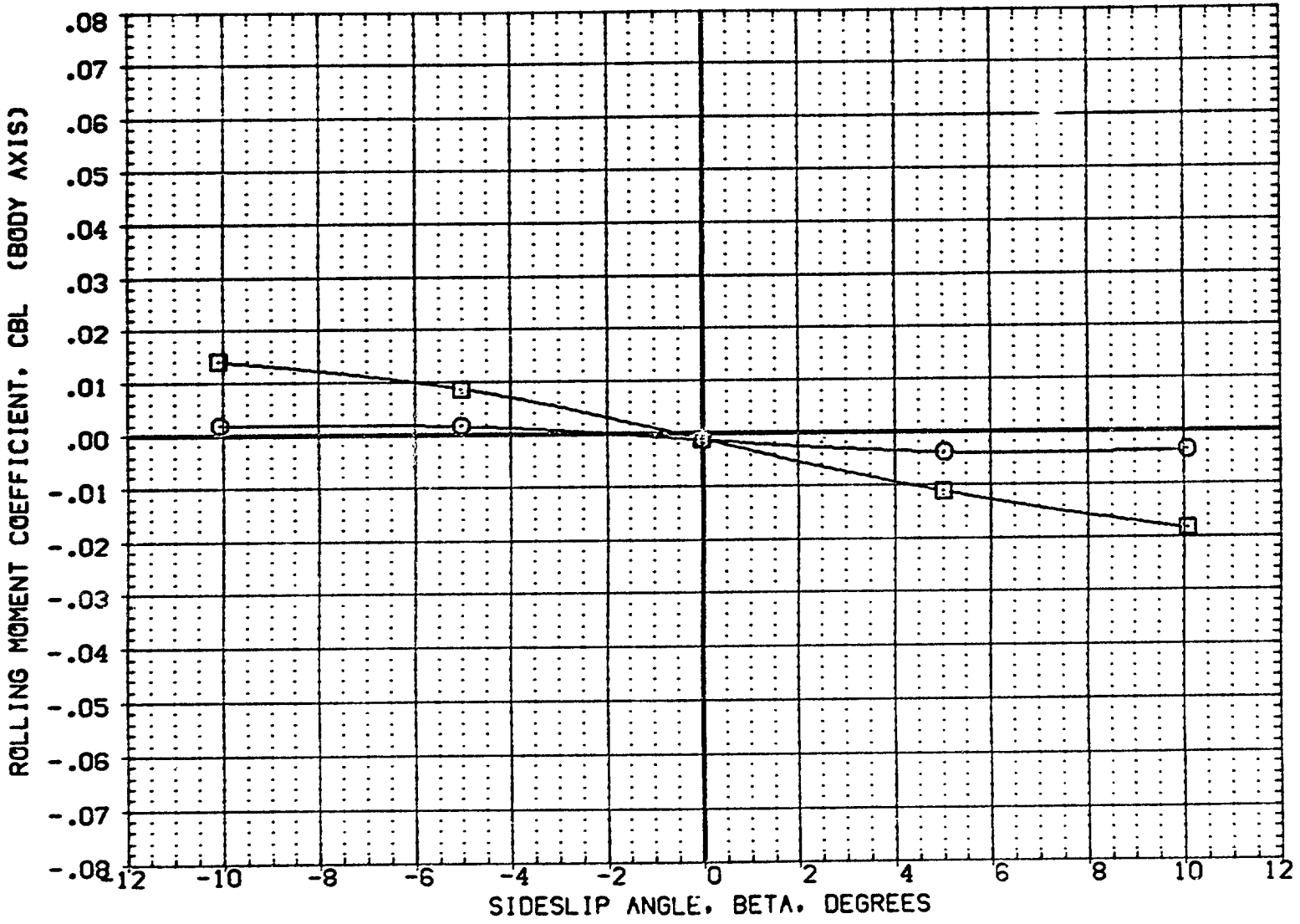


FIG 34 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES UNDERWING XO=1060

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RDUO50)	CA71C B16CSD7J34F1V87 E18V3R3X10
(RDUO51)	CA71C B16CSD7J34F1V87 E18V3R3X10

ALPHA	NACX/L	NACLIP	NACBTA
.000	.530	7.000	5.000
10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2288	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

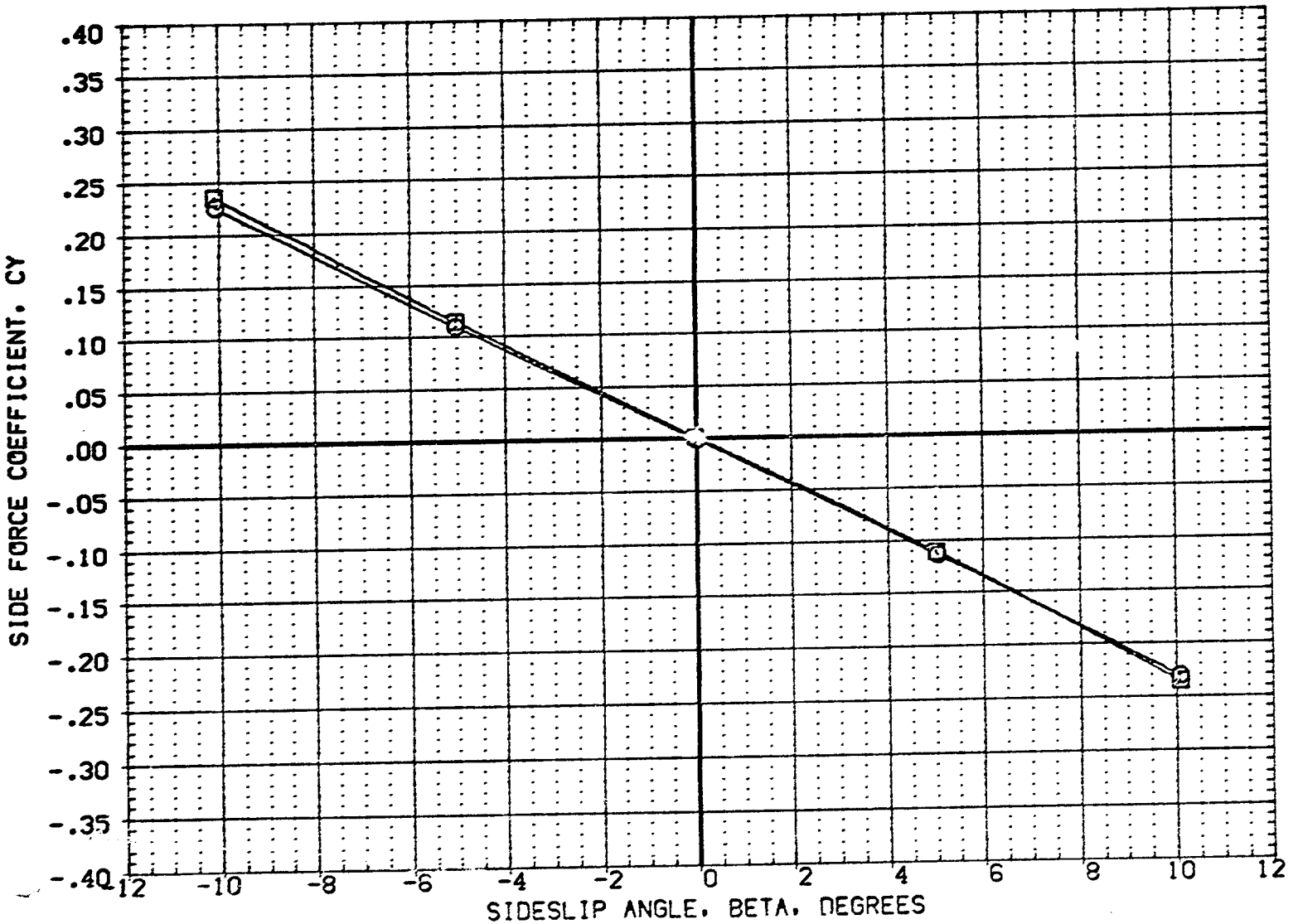


FIG 34 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES UNDERWING XO=1060

(A)MACH = .20

0A71C B16C5D7J34F1W87 E18V3R3X10 (DDU050)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	.210	BOFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU050	.000	DDU051	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.530					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

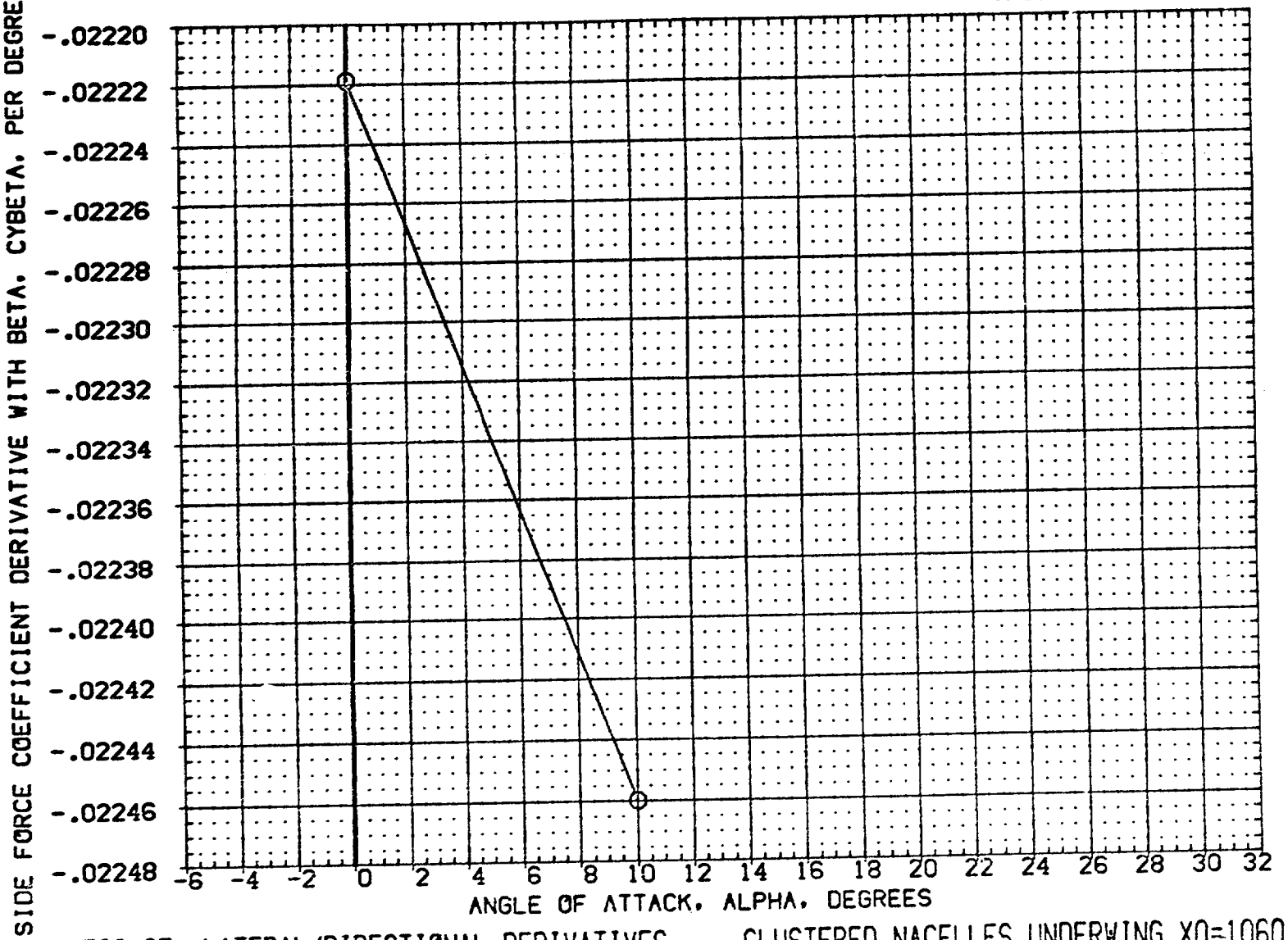


FIG 35 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES UNDERWING XO=1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (DDU050)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	.210	BDFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU050	.000	DDU051	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.530					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

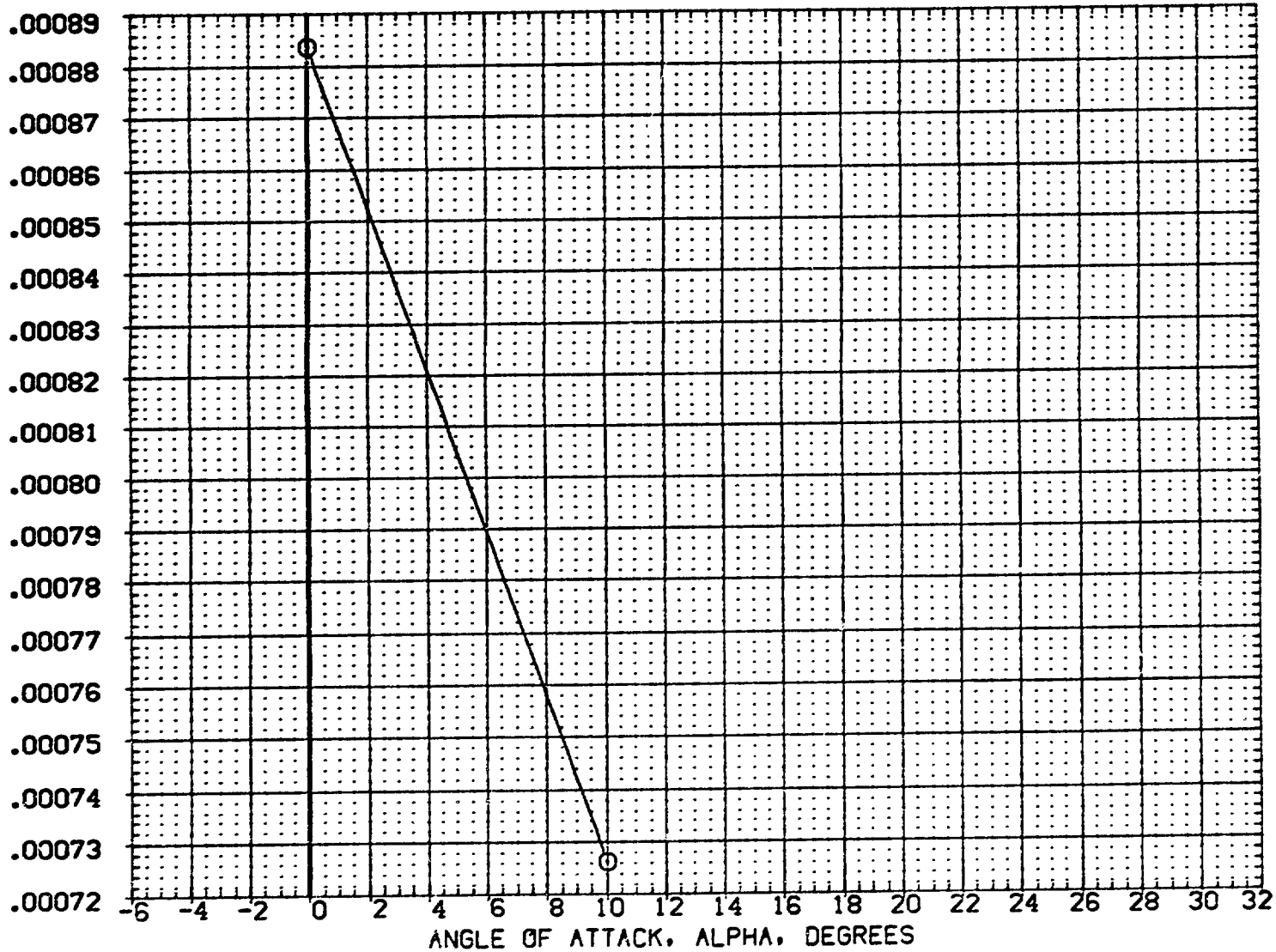


FIG 35 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES UNDERWING XO=1060

0A71C B16C5D7J34F1W87 E18V3R3X10 (DDU050)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	.210	BDFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU050	.000	DDU051	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.530					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

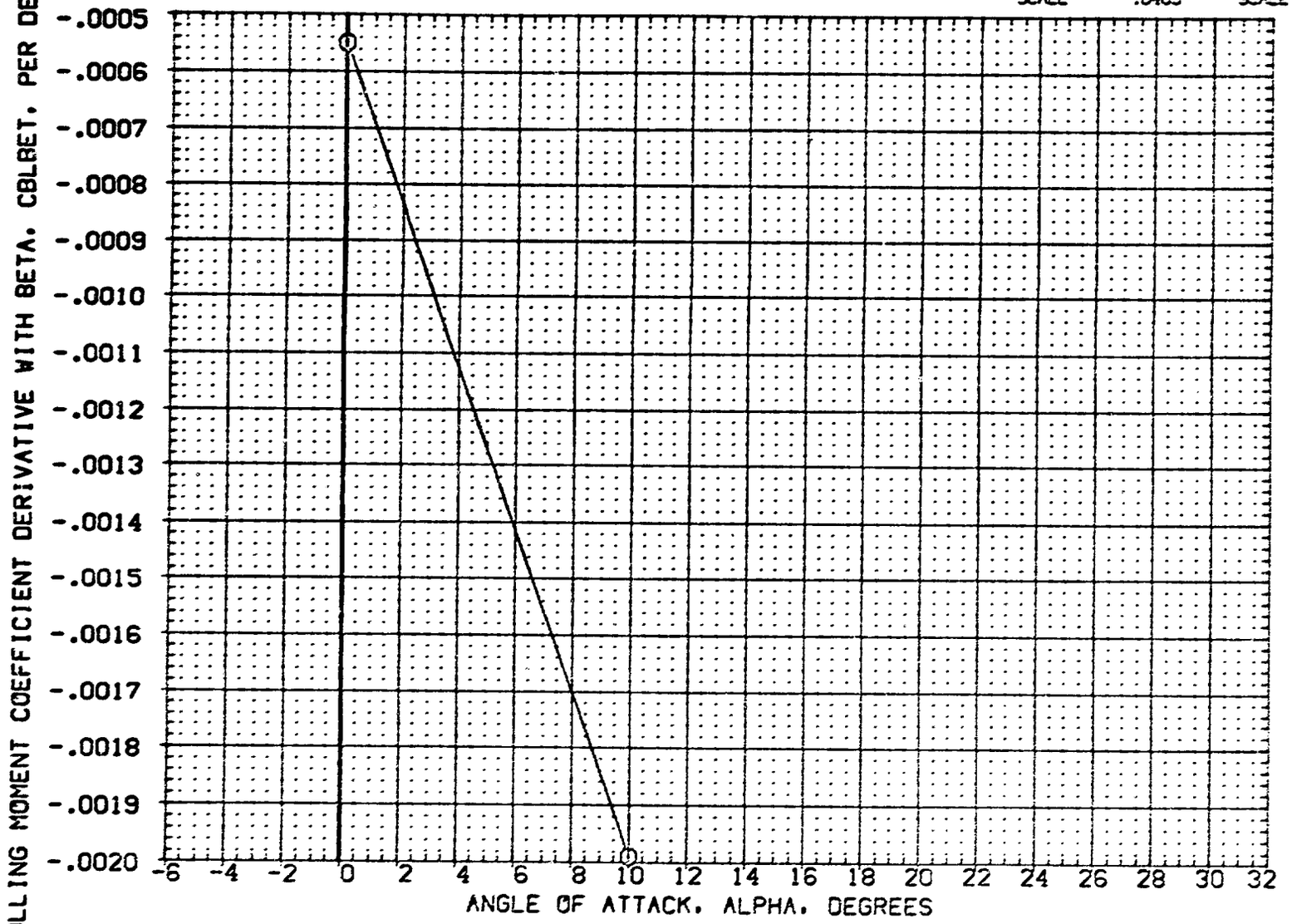


FIG 35 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES UNDERWING XO=1060

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	NACX/L	NACLIP	NACBTA
(RDUC59)	○	DA71C B16C507J35F1V87 E18V3R3X10	.000	.530	7.000	5.000
(RDUC60)	□	DA71C B16C507J35F1V87 E18V3R3X10	10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

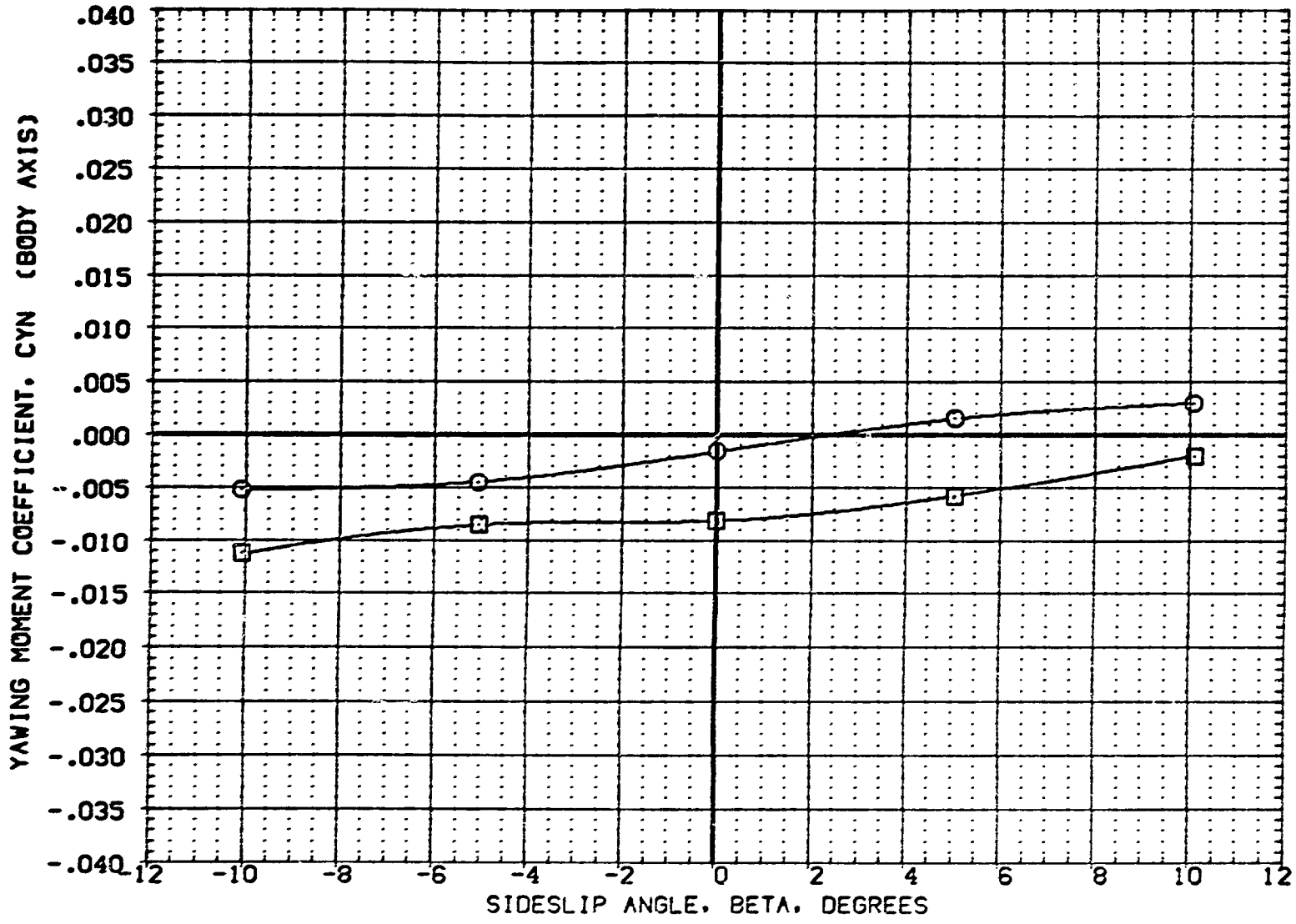


FIG 36 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES 2 OVERWING X=1060

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	NACX/L	NACLIP	NACBTA
(ROU059)	○	OA7:C B16CSD7J3SF1V87 E18V3R3X10	.000	.530	7.000	5.000
(ROU060)	□	OA7:C B16CSD7J3SF1V87 E18V3R3X10	10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

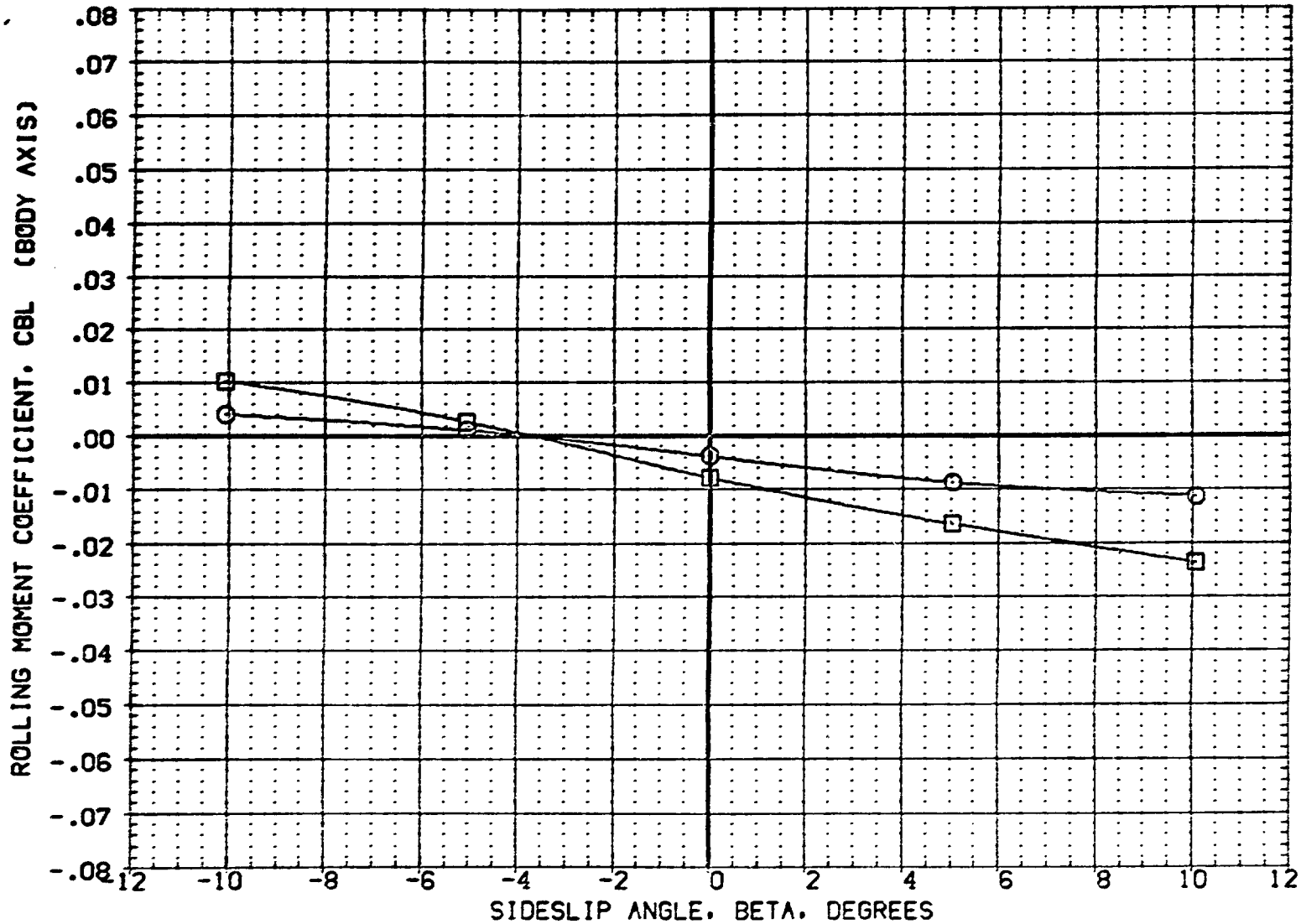


FIG 36 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES 2 OVERWING X=1060

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(RDU059)	○	DA71C B16C507J35F1V87 E18V3R3X10
(RDU060)	□	DA71C B16C507J35F1V87 E18V3R3X10

ALPHA	NACX/L	NACLIP	NACBTA
.000	.530	7.000	5.000
10.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

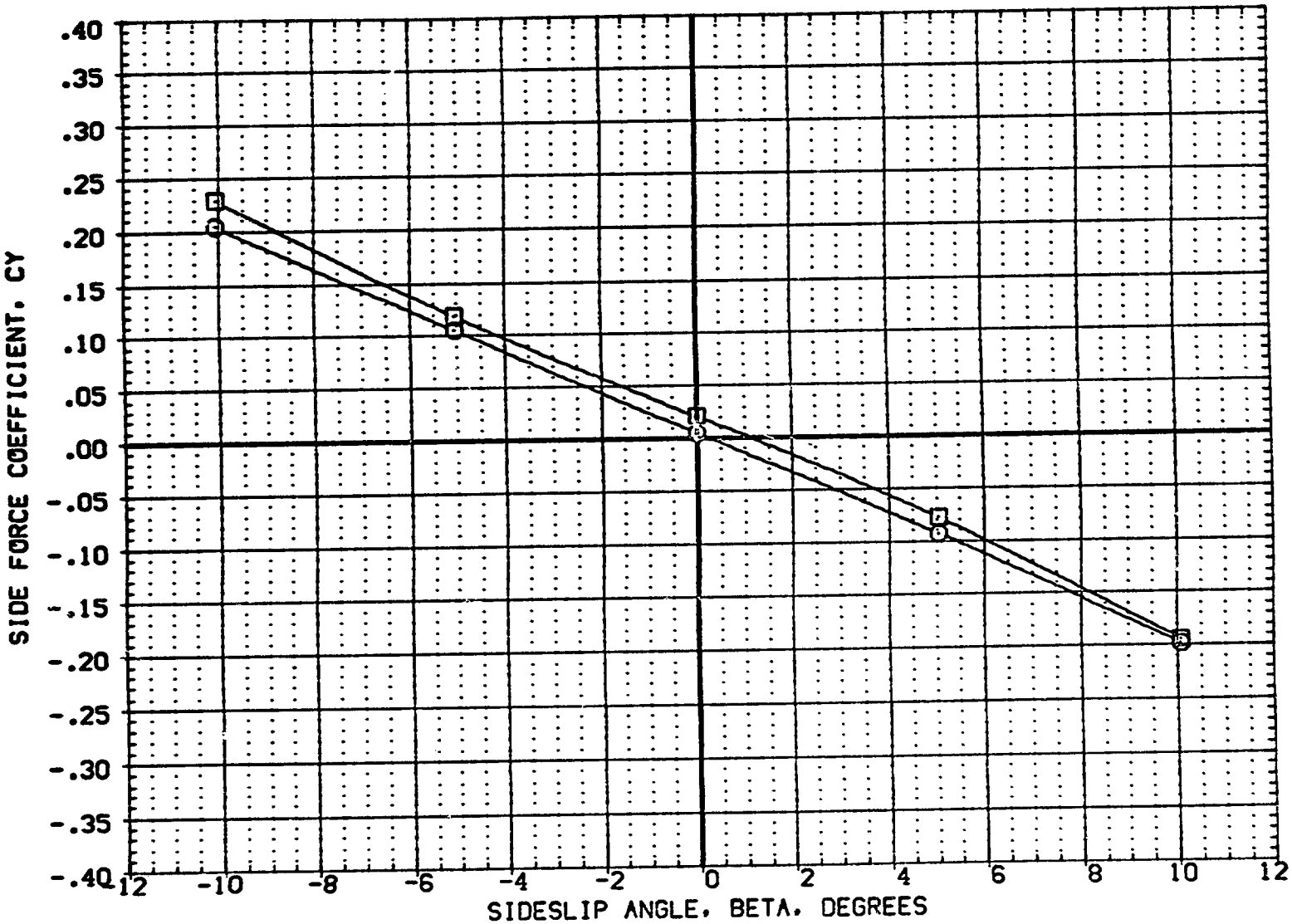


FIG 36 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES 2 OVERWING X=1060

(A)MACH = .20

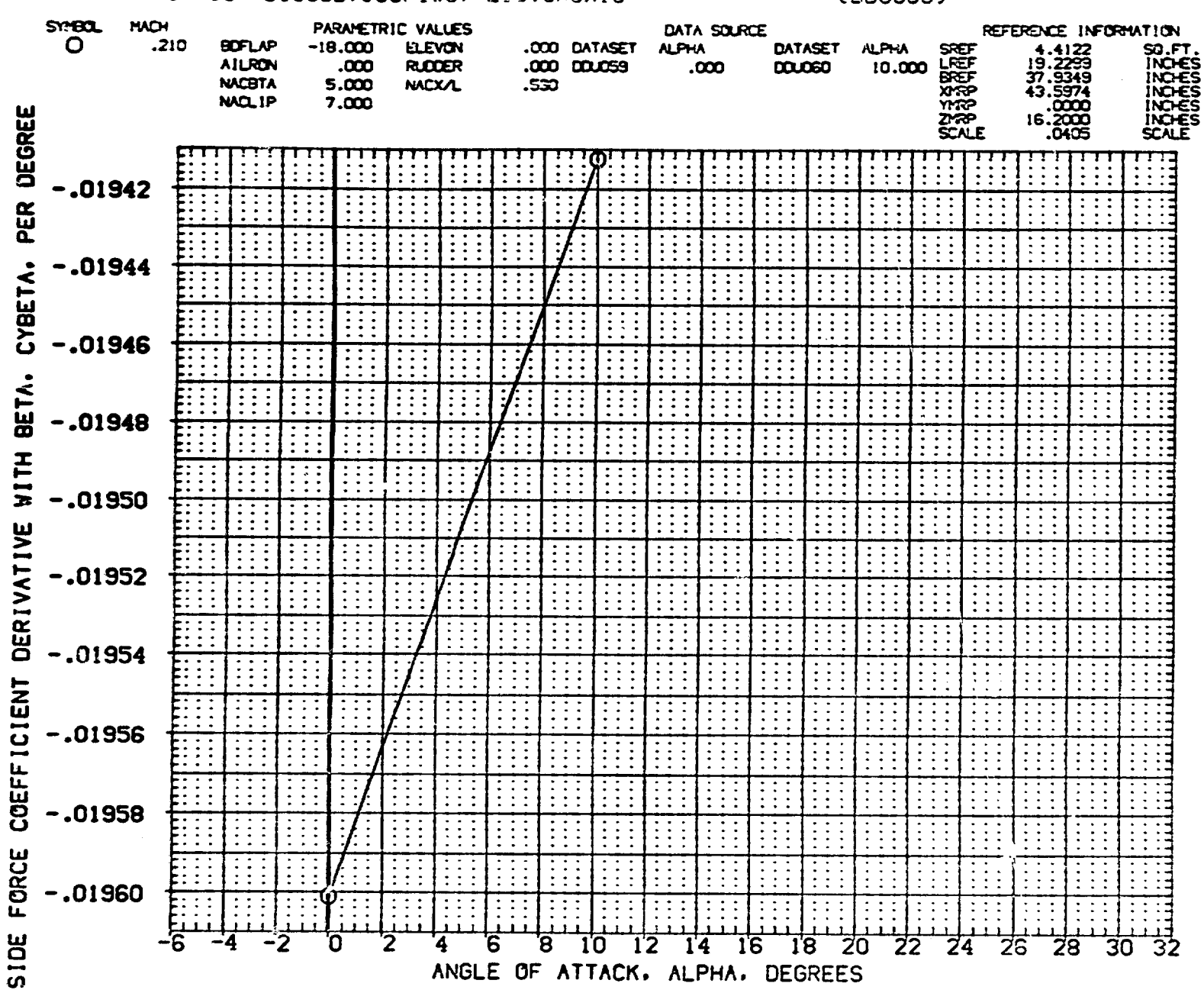


FIG 37 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES 2 OVERWING X=1060

0A71C B16C5D7J35F1W87 E18V3R3X10 (DDU059)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	.210	BOFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU059	.000	DDU060	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.530					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

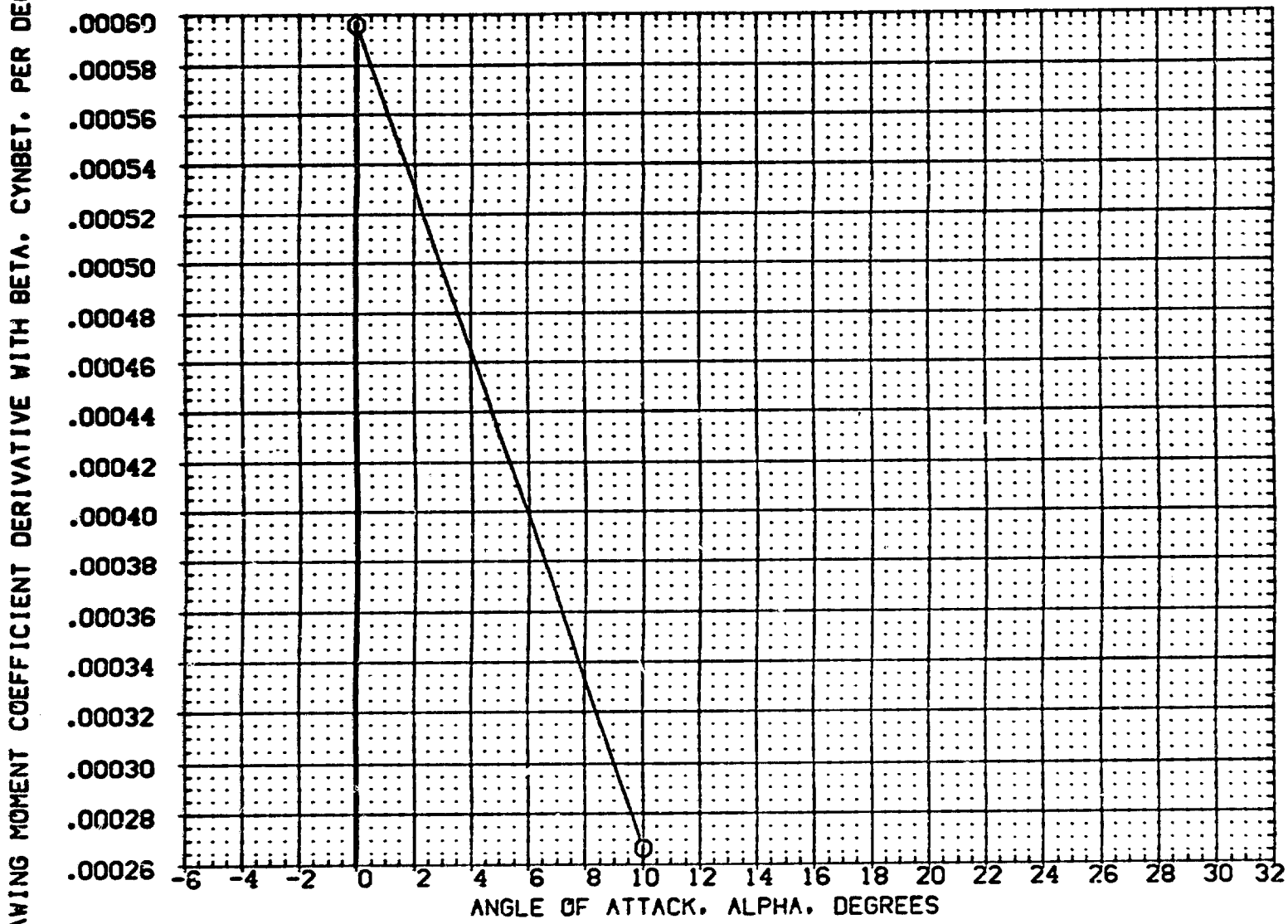


FIG 37 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES 2 OVERWING X=1060

0A71C B16C5D7J35F1W87 E1GV6RSX10 (DDU059)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	.210	BOFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU059	.000	DDU060	10.000	LREF	19.2269	INCHES
		NACBTA	5.000	NACX/L	.530					BREF	37.3349	INCHES
		NACLIP	7.000							XREF	43.5974	INCHES
										YREF	.0000	INCHES
										ZREF	16.2000	INCHES
										SCALE	.0405	SCALE

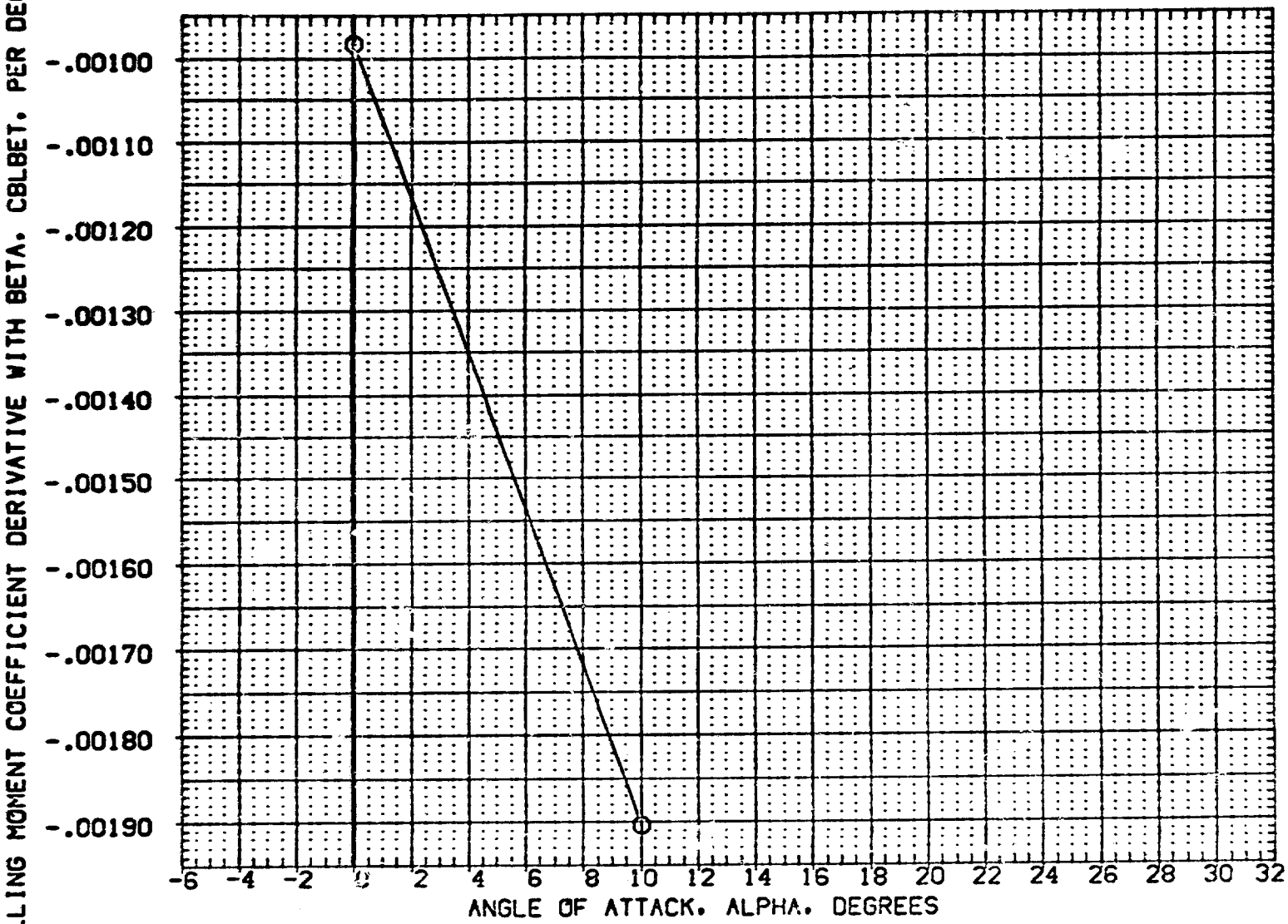


FIG 37 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES 2 OVERWING X=1060

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(RDU068)	○	CA71C B16C507J35F1V87 E18V3R3X10
(RDU069)	□	CA71C B16C507J35F1V87 E18V3R3X10

ALPHA	NACX/L	NACLIP	NACBYA
.000	.000	7.000	5.000
10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2293	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

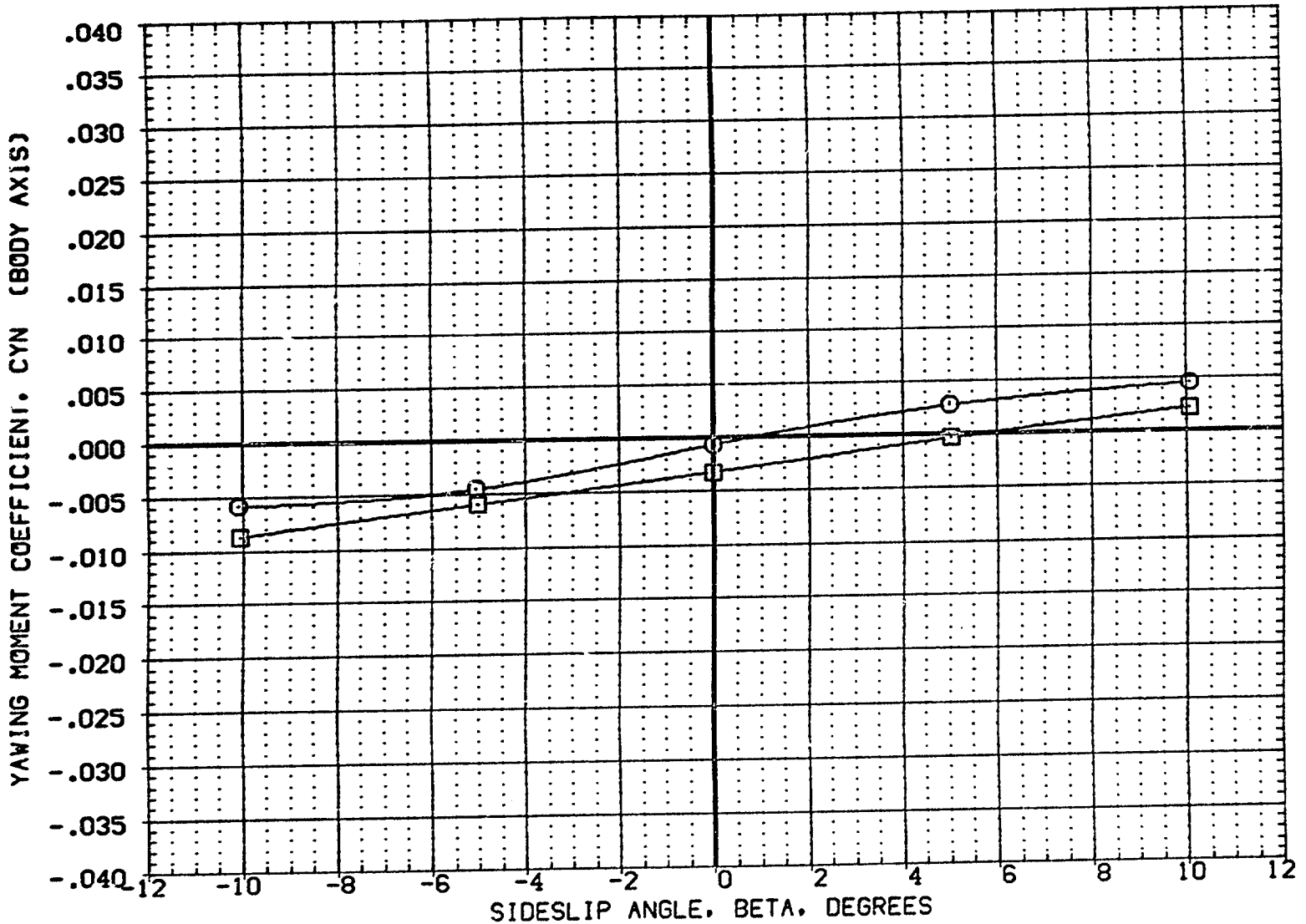


FIG 38 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES 2 OVERWING X= 950

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ALPHA	NACX/L	NACLIP	NACBTA
(RDU068)	○	0A71C B16CS07J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(RDU069)	□	0A71C B16CS07J35F1V87 E18V3R3X10	10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

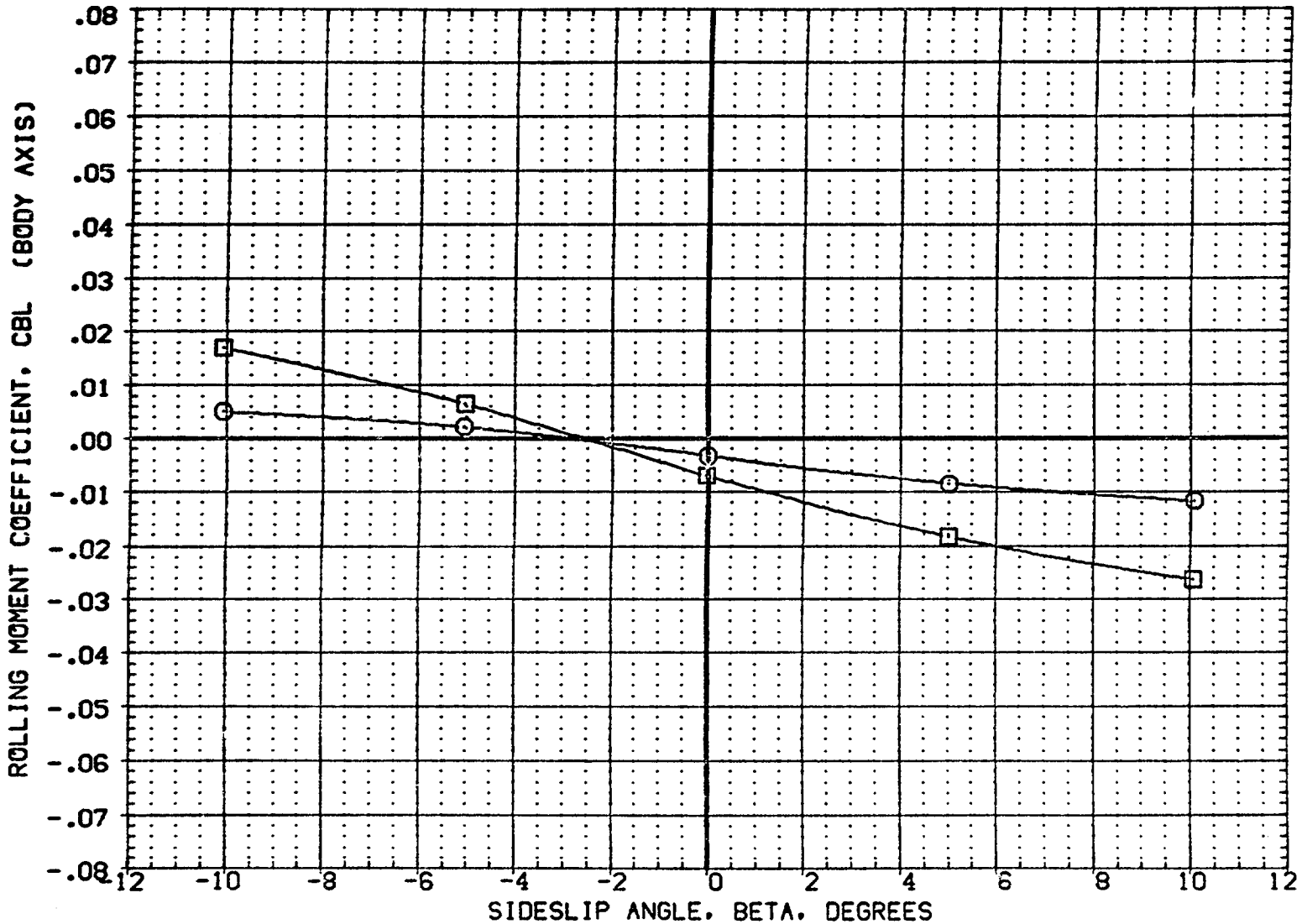


FIG 38 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES 2 OVERWING X= 950

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	NACX/L	NACLIP	NACBTA
(RDU068)	○	CA71C B16CSD7J3SF1V87 E18V3R3X10	.000	.000	7.000	5.000
(RDU069)	□	CA71C B16CSD7J3SF1V87 E18V3R3X10	10.000	.000	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2259	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

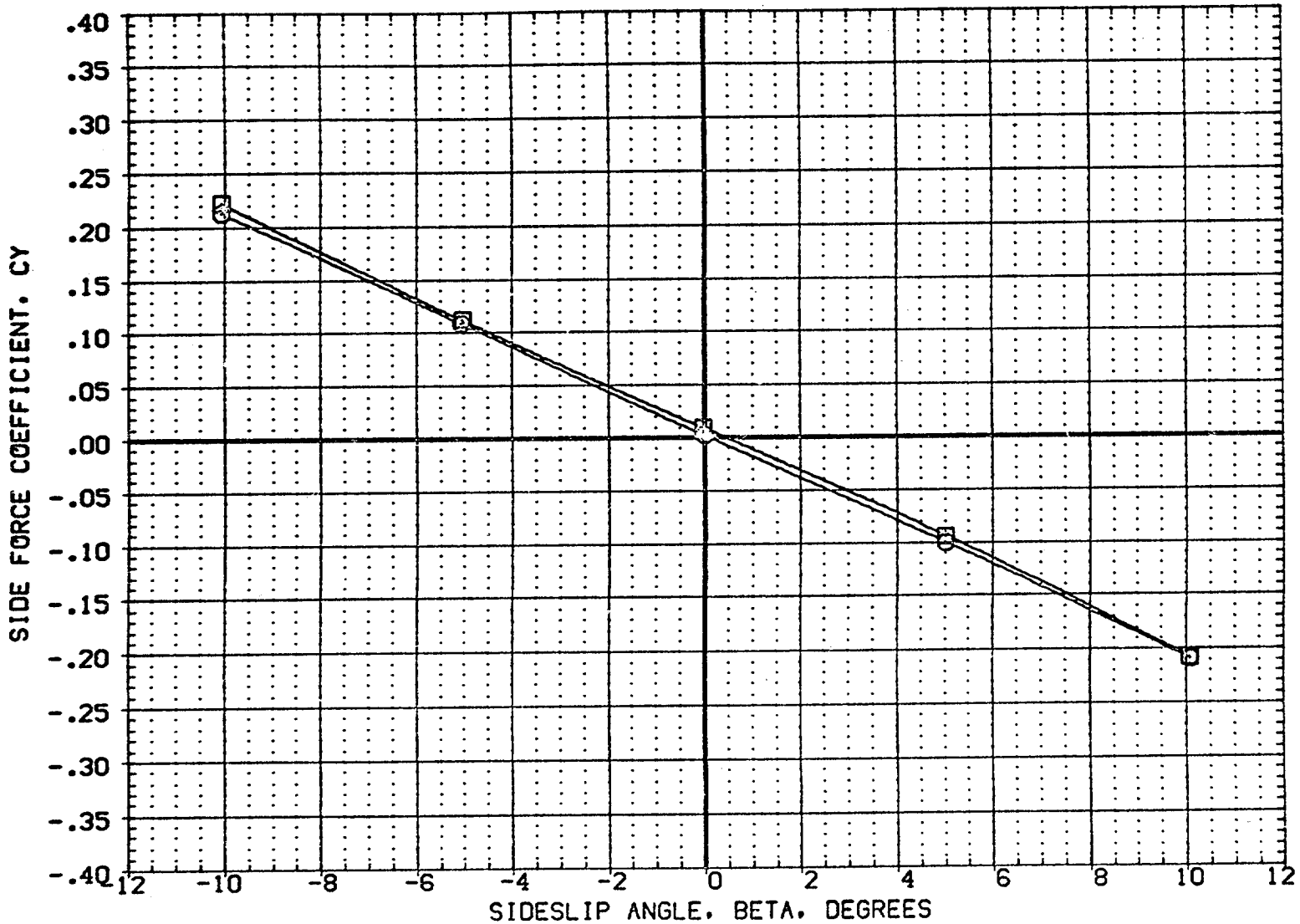


FIG 38 LATERAL/DIRECTIONAL CHARACTERISTICS-CLUSTERED NACELLES 2 OVERWING X= 950

(A)MACH = .20

0A71C B16C5D7J35F1W87 E18V3R3X1C (DDU068)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	.210	BDFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA	SREF	4.4122	SQ.FT.
		AILRON	.000	RUDDER	.000	DDU068	.000	DDU069	10.000	LREF	19.2299	INCHES
		NACBTA	5.000	NACX/L	.000					BREF	37.9349	INCHES
		NACLIP	7.000							XMRP	43.5974	INCHES
										YMRP	.0000	INCHES
										ZMRP	16.2000	INCHES
										SCALE	.0405	SCALE

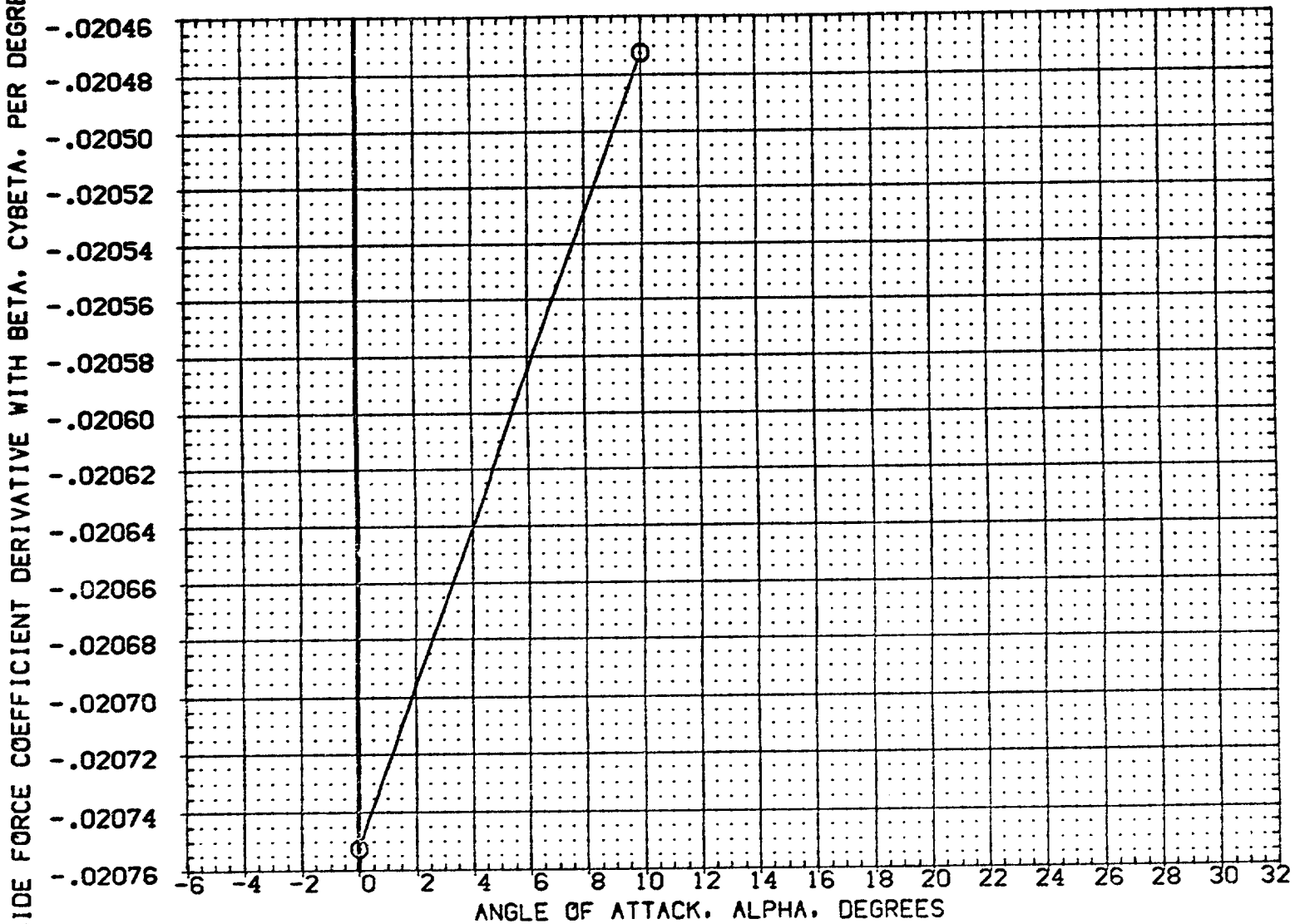


FIG 39 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES 2 OVERWING X= 950

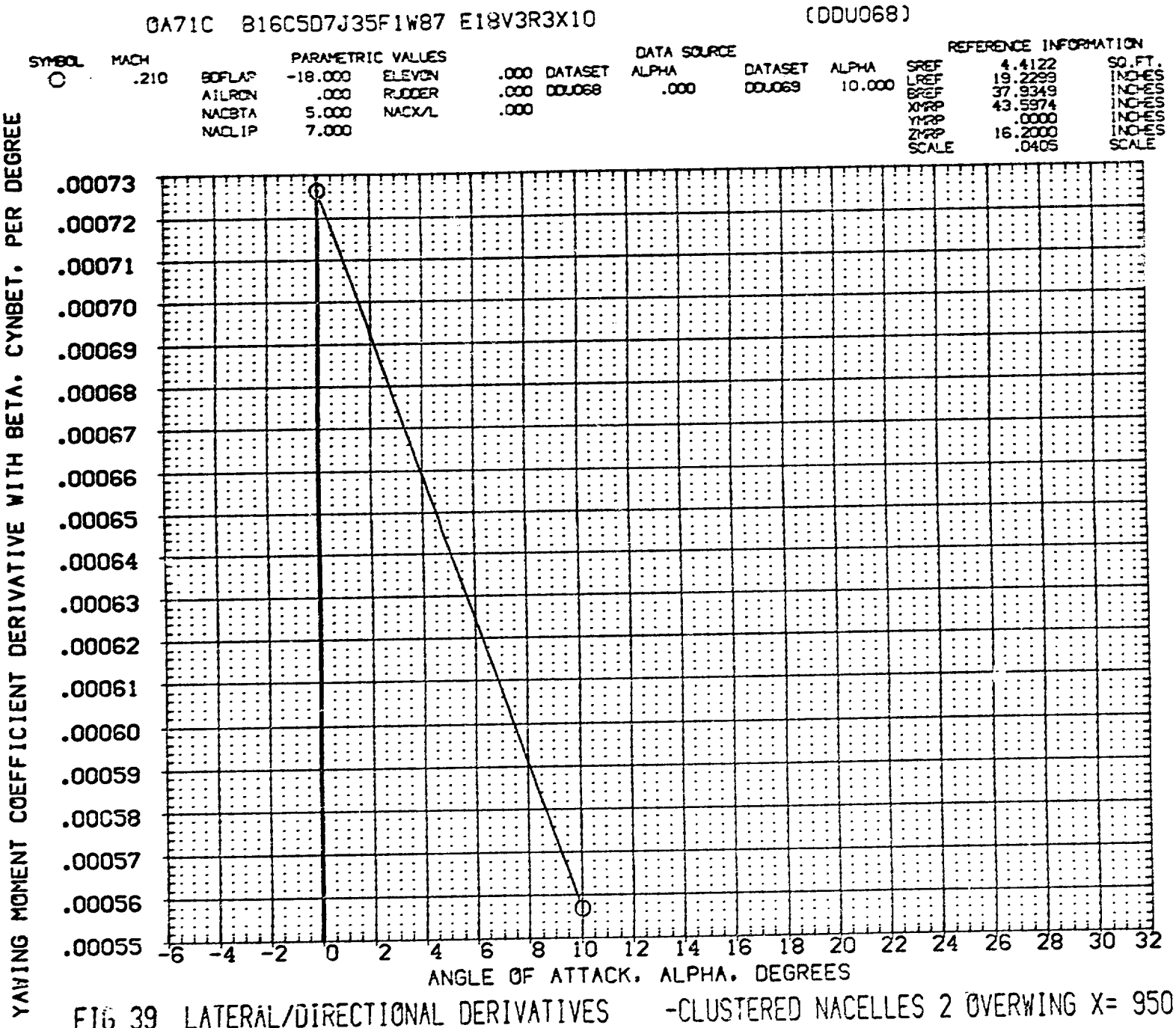


FIG 39 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES 2 OVERWING X= 950

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE			
○	.210	BOFLAP	-18.000	ELEVON	.000	DATASET	ALPHA	DATASET	ALPHA
		AILRON	.000	RUDDER	.000	DDJ069	.000	DDJ069	10.000
		NACBTA	5.000	NACX/L	.000				
		NACLIP	7.000						

REFERENCE INFORMATION		
SREF	4.4122	SQ. FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

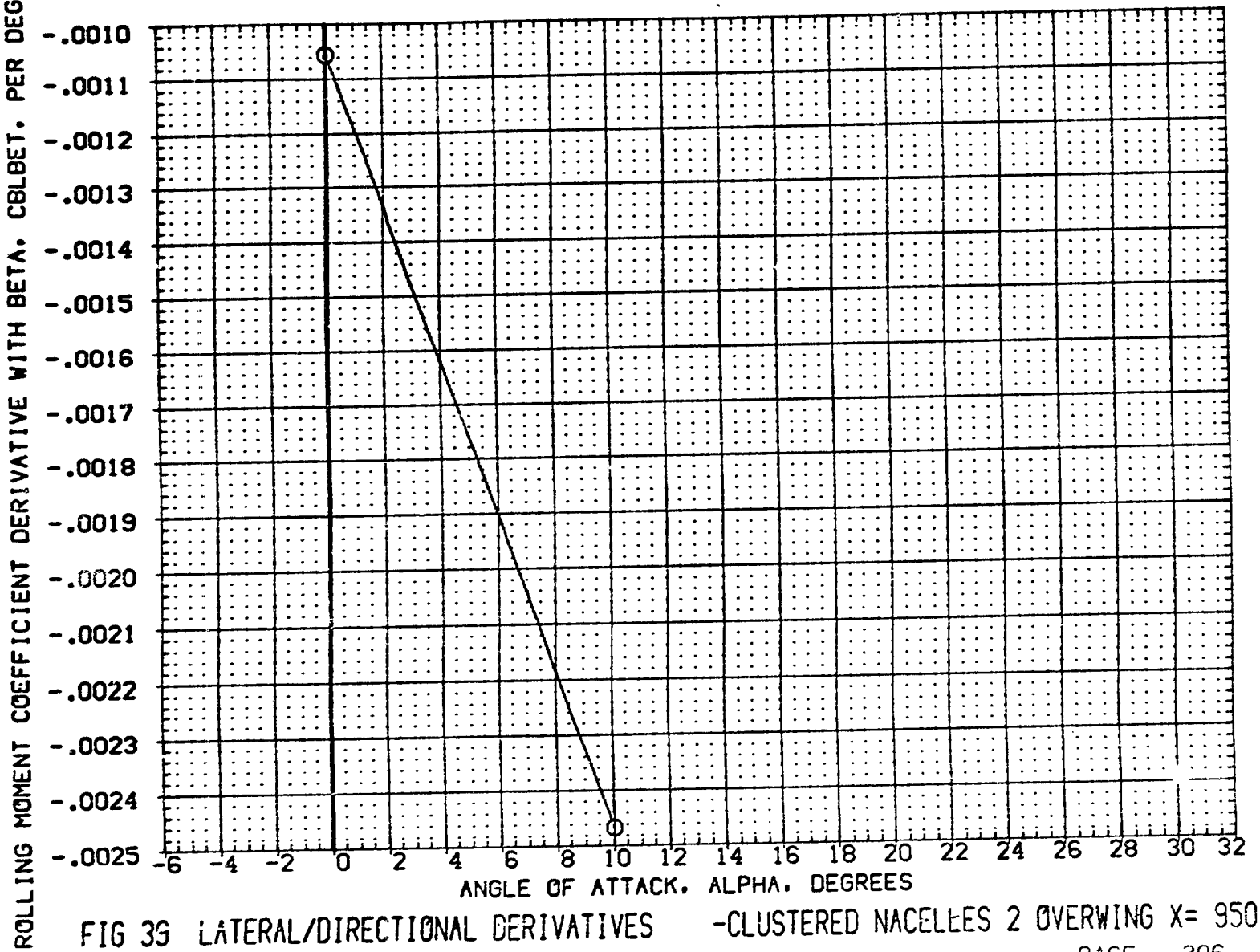


FIG 39 LATERAL/DIRECTIONAL DERIVATIVES -CLUSTERED NACELLES 2 OVERWING X= 950

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADJ073) ○	CA71C B16C507J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADJ072) □	CA71C B16C507J36F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADJ077) ◇	CA71C B16C507J36F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2799	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

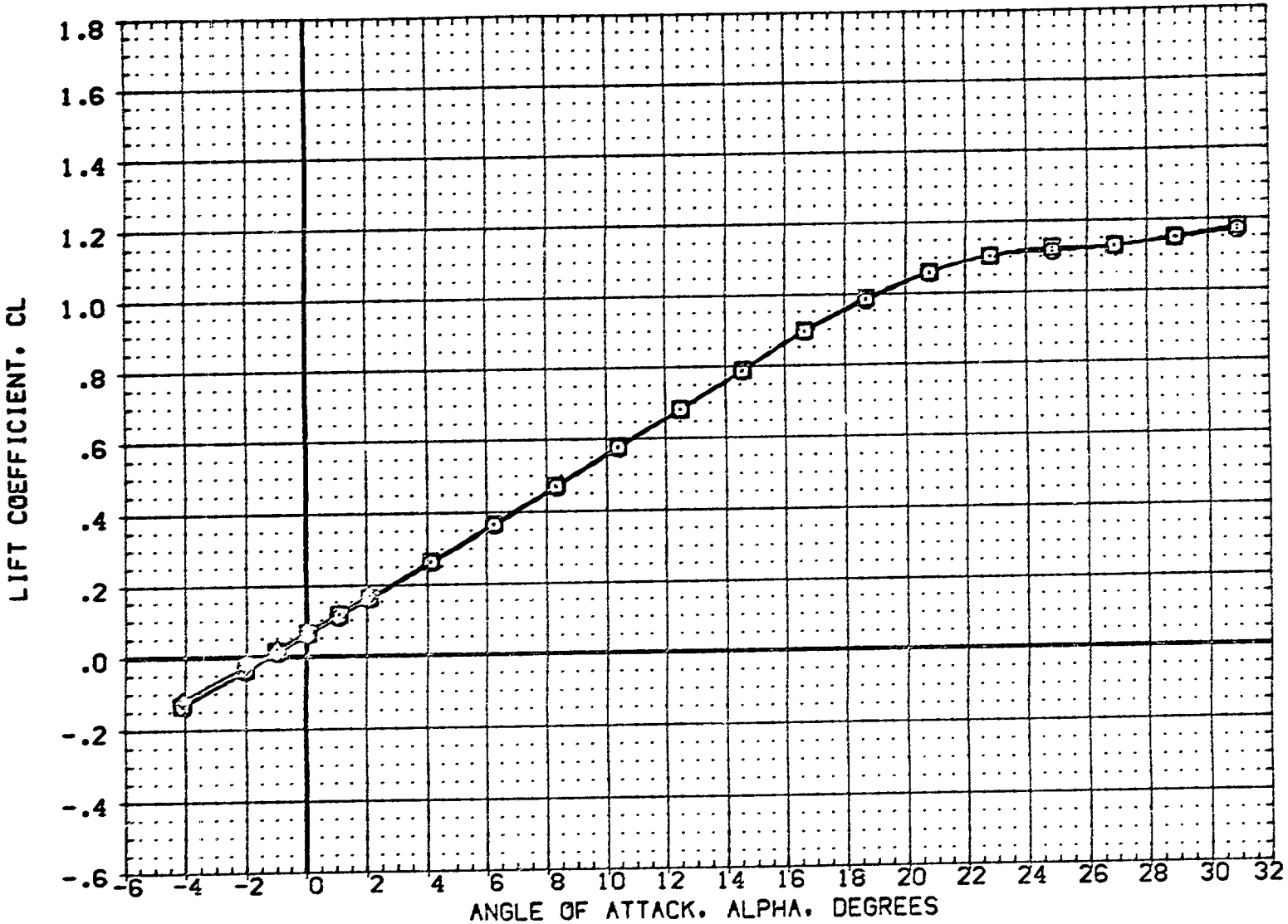


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU073)	○	DA71C B16C507J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU072)	□	DA71C B16C507J33F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU077)	◇	DA71C B16C507J39F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

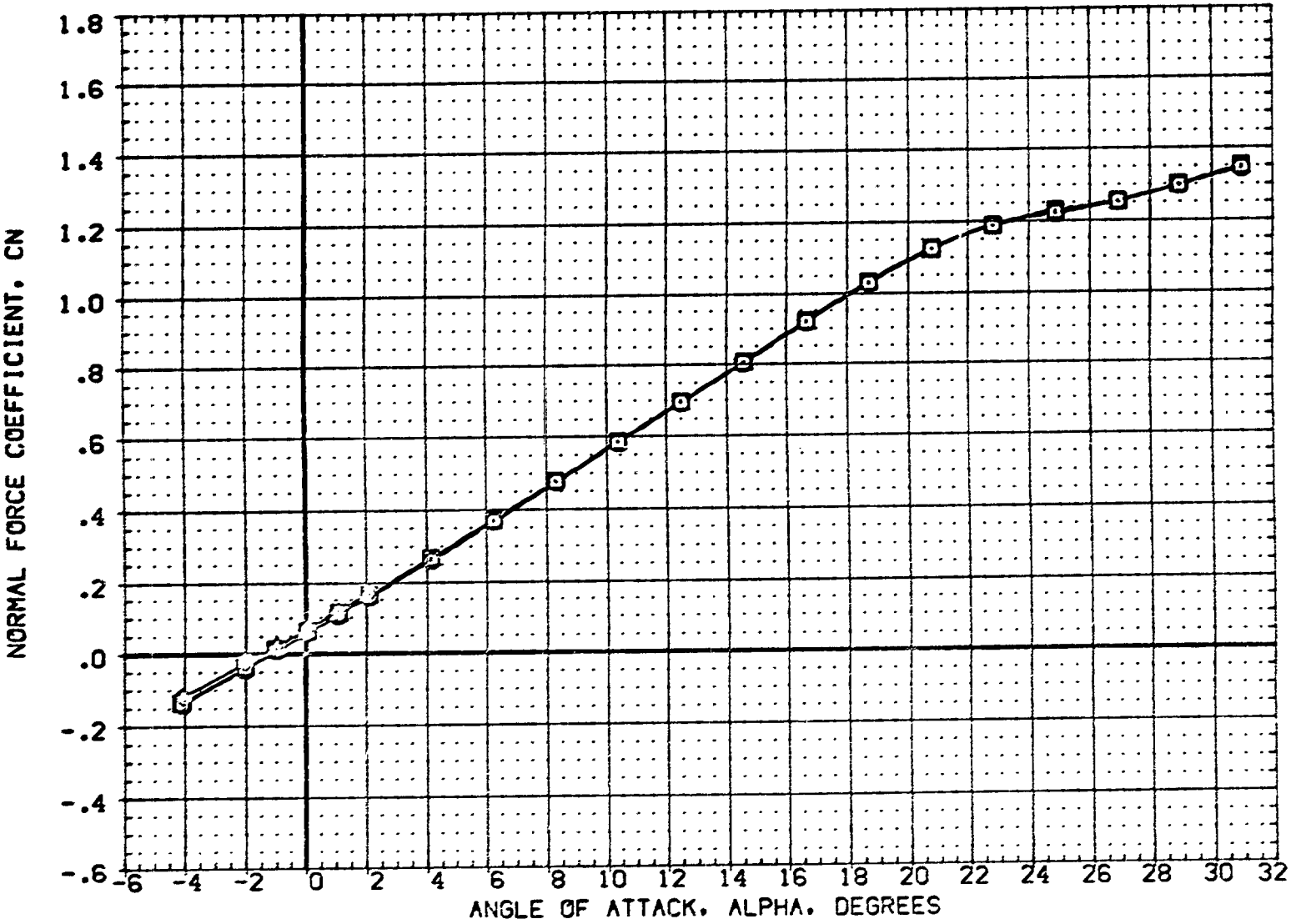


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU073) ○	DA71C B16CSD7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU072) □	DA71C B16CSD7J36F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU077) ◇	DA71C B16CSD7J35F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
EREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

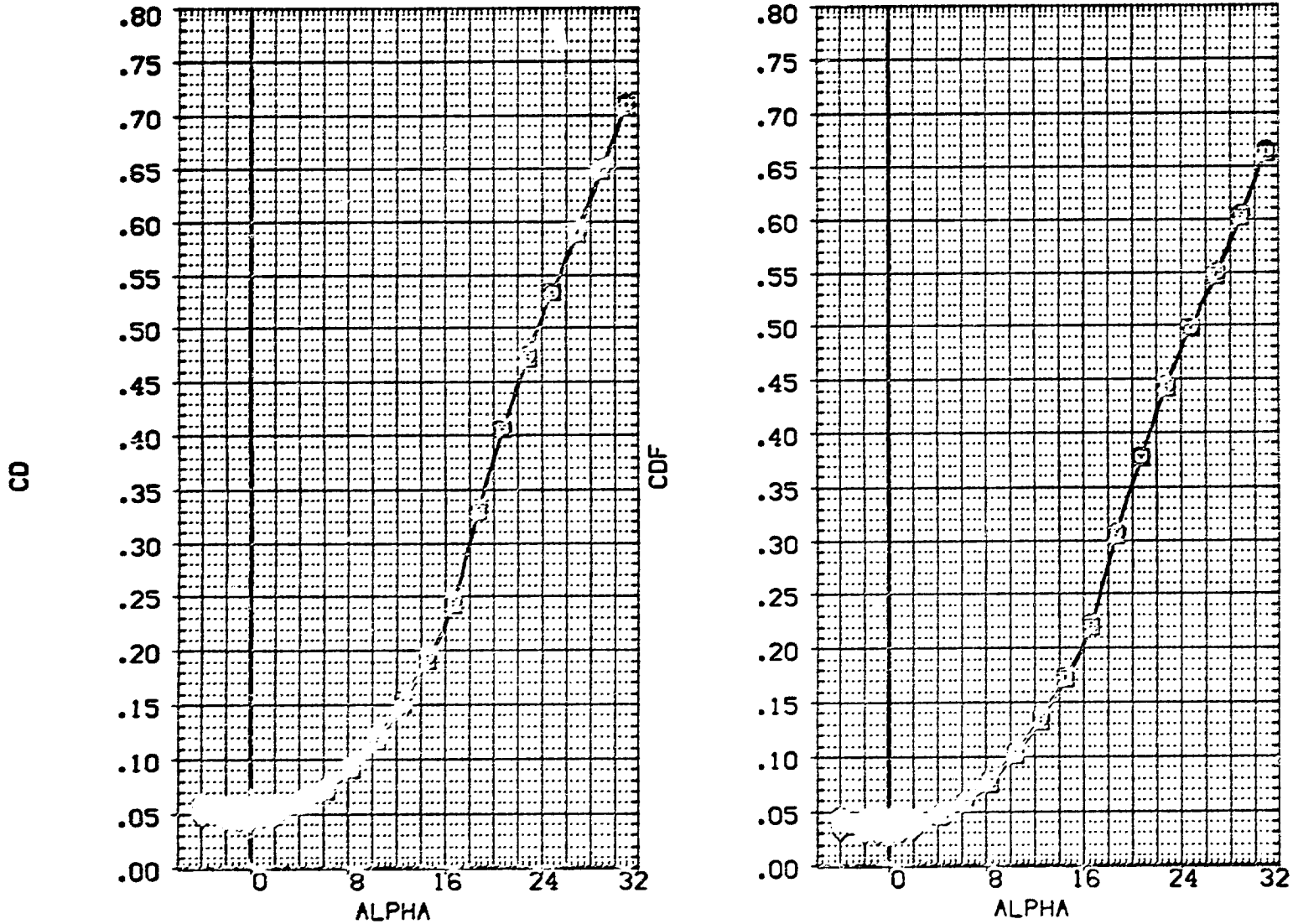


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU073)		GA71C B16CSD7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU072)		GA71C B16CSD7J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU077)		GA71C B16CSD7J35F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2239	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

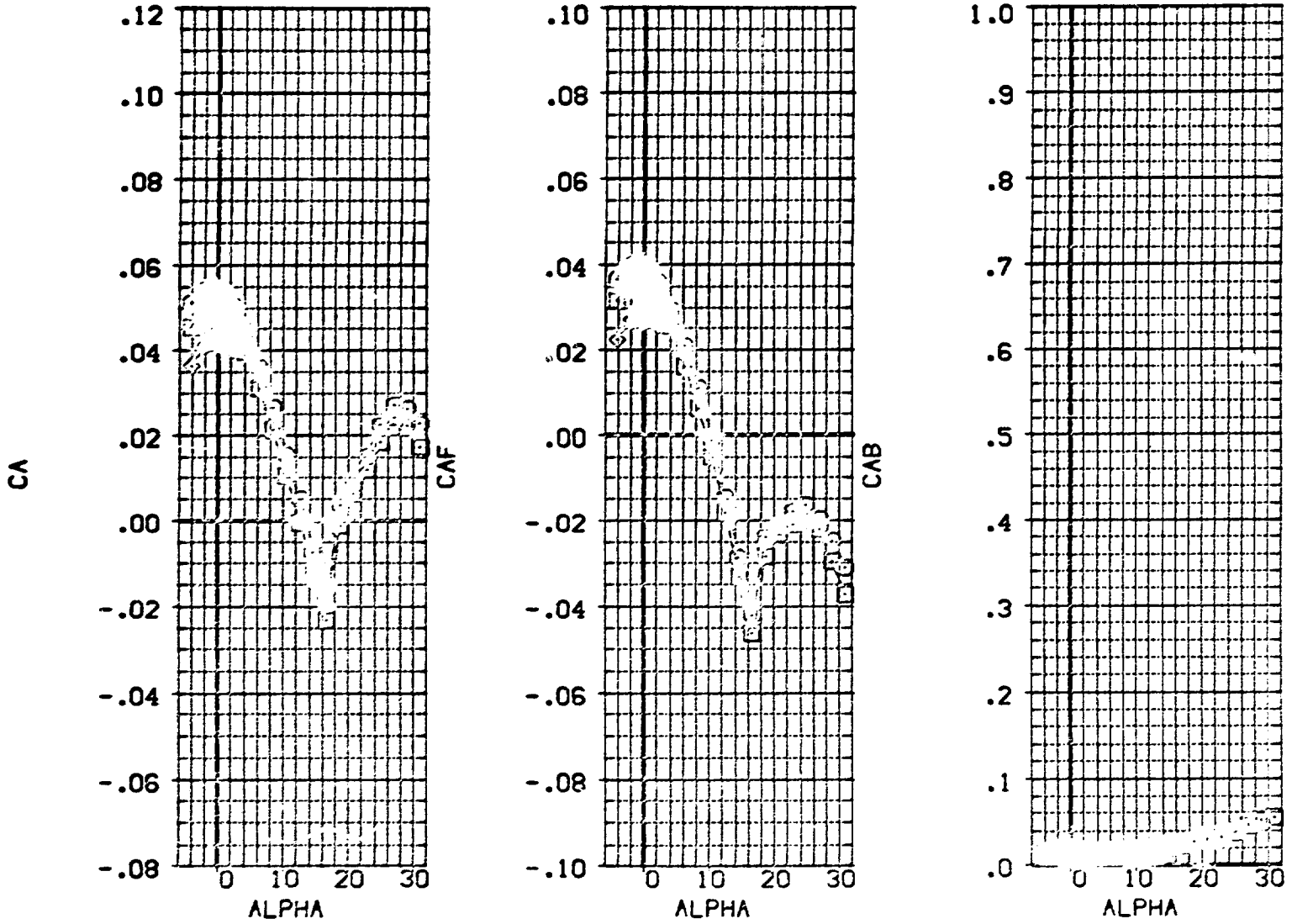


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(ADJC73)	○	CA71C B16CSD7J34F1V87 E18V3R3X10
(ADJC72)	□	CA71C B16CSD7J33F1V87 E18V3R3X10
(ADJC77)	◇	CA71C B16CSD7J39F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
.000	.000	7.000	5.000
.000	.000	7.000	5.000
.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

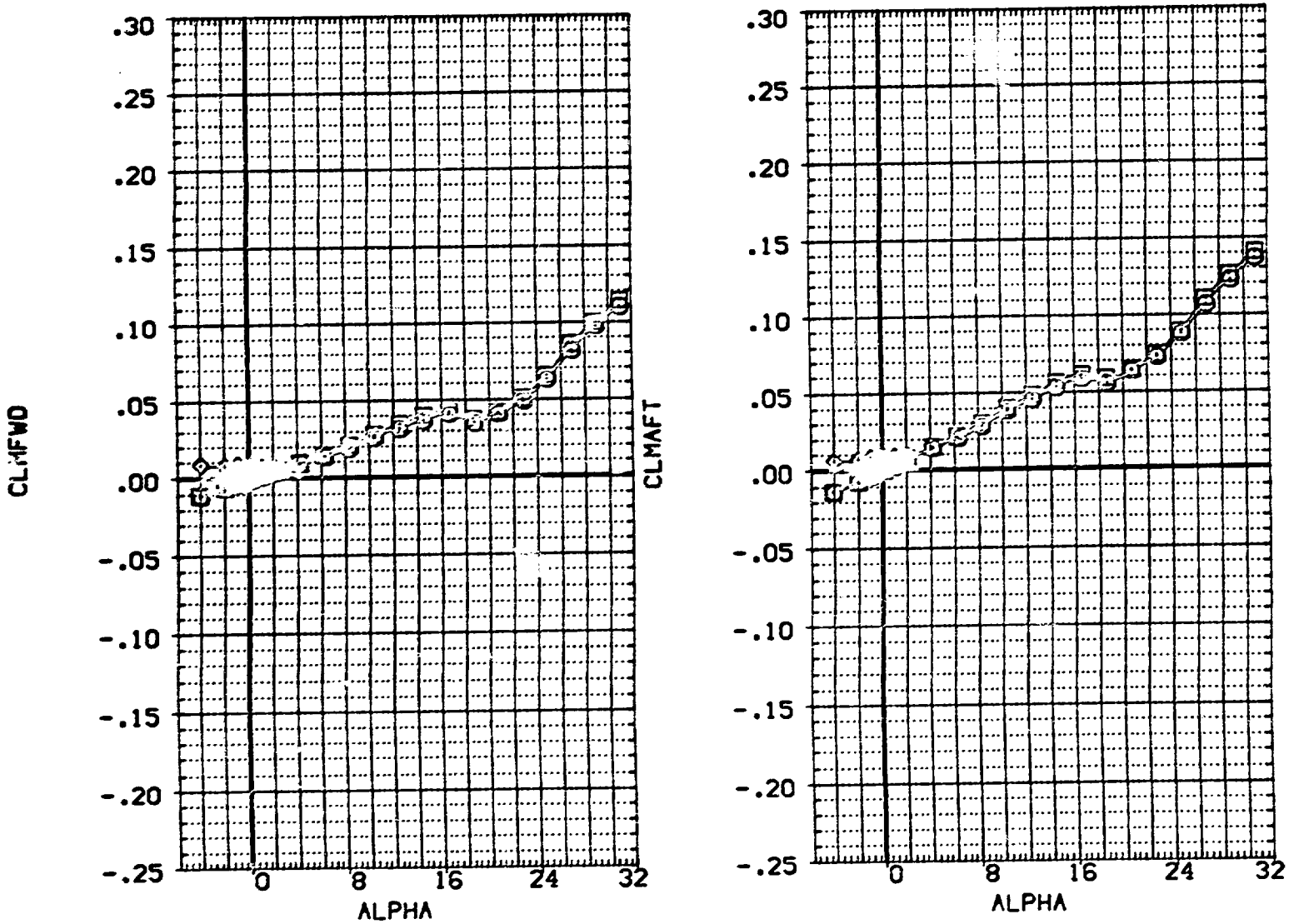


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU073)	○	OA71C B16CS07J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU072)	□	OA71C B16CS07J33F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU077)	◇	OA71C B16CS07J39F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

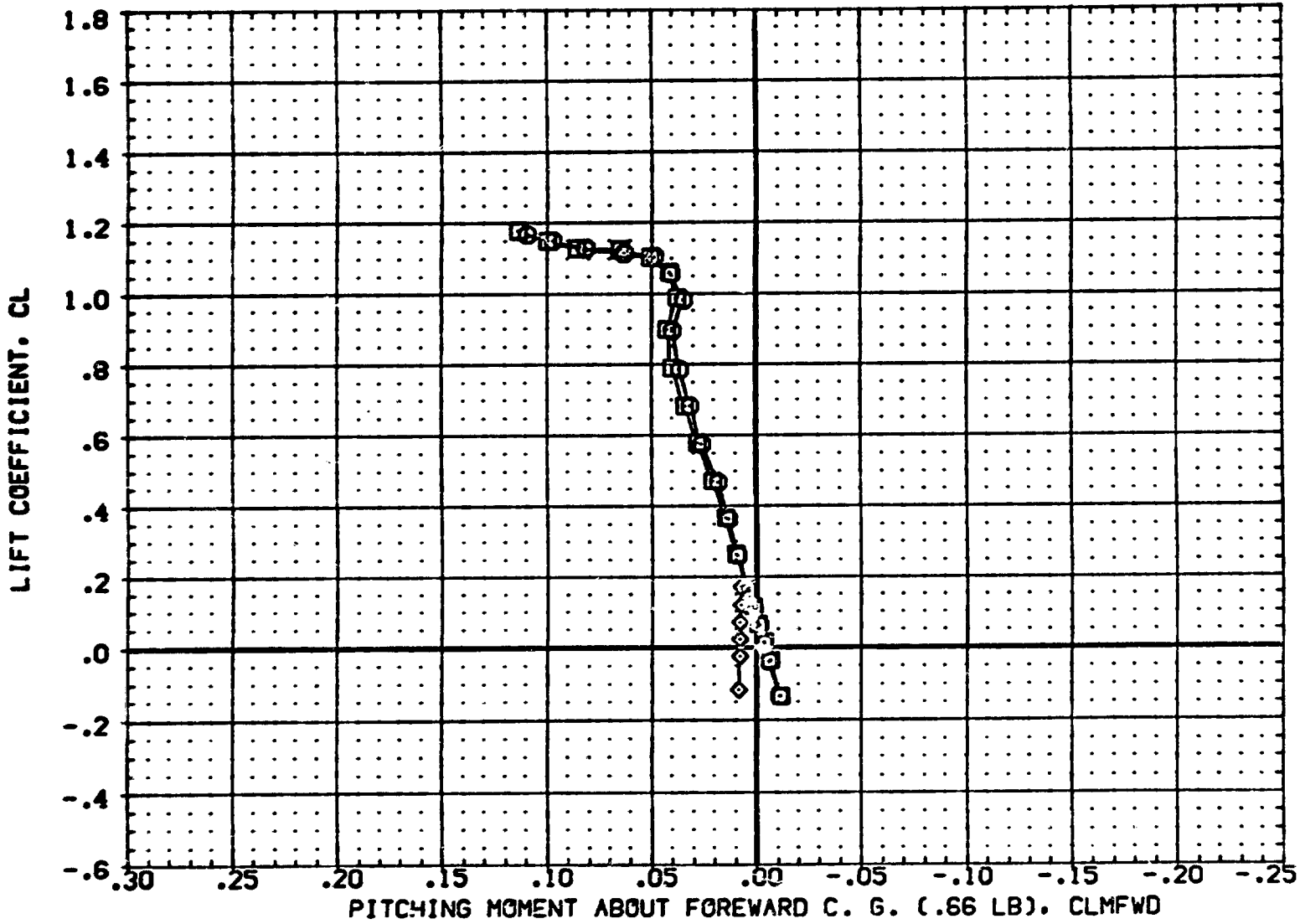


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACXL	NACLIP	NACBTA
(ADU073)	○	0A71C B16C5J7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU072)	□	0A71C B16C5J7J36F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU077)	◇	0A71C B16C5J7J39F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

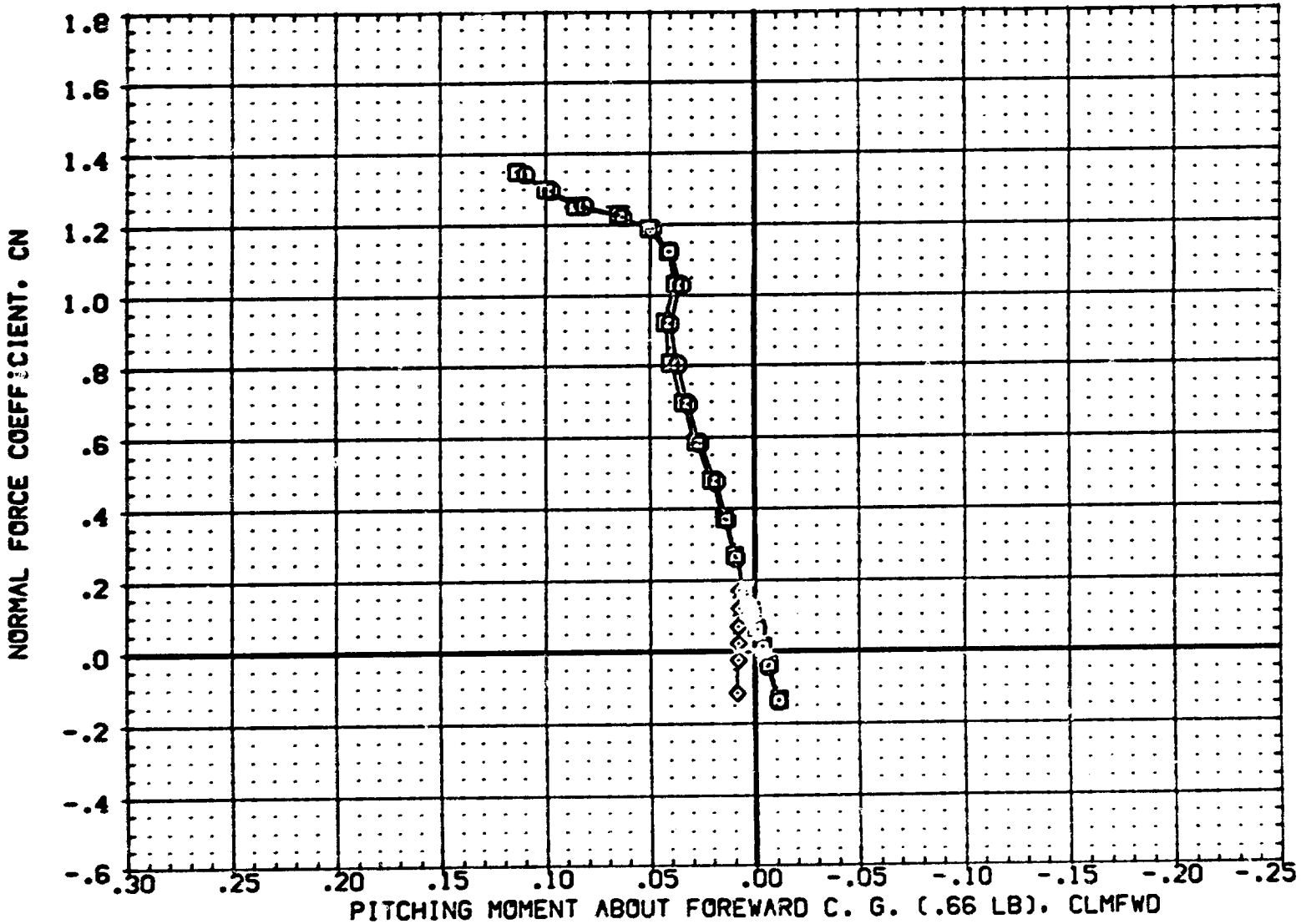


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU073) ○	DA7IC B16CSD7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU072) □	DA7IC B16CSD7J35F1V87 E18V3P3X10	.000	.000	7.000	5.000
(ADU077) ◇	DA7IC B16CSD7J39F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2259	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

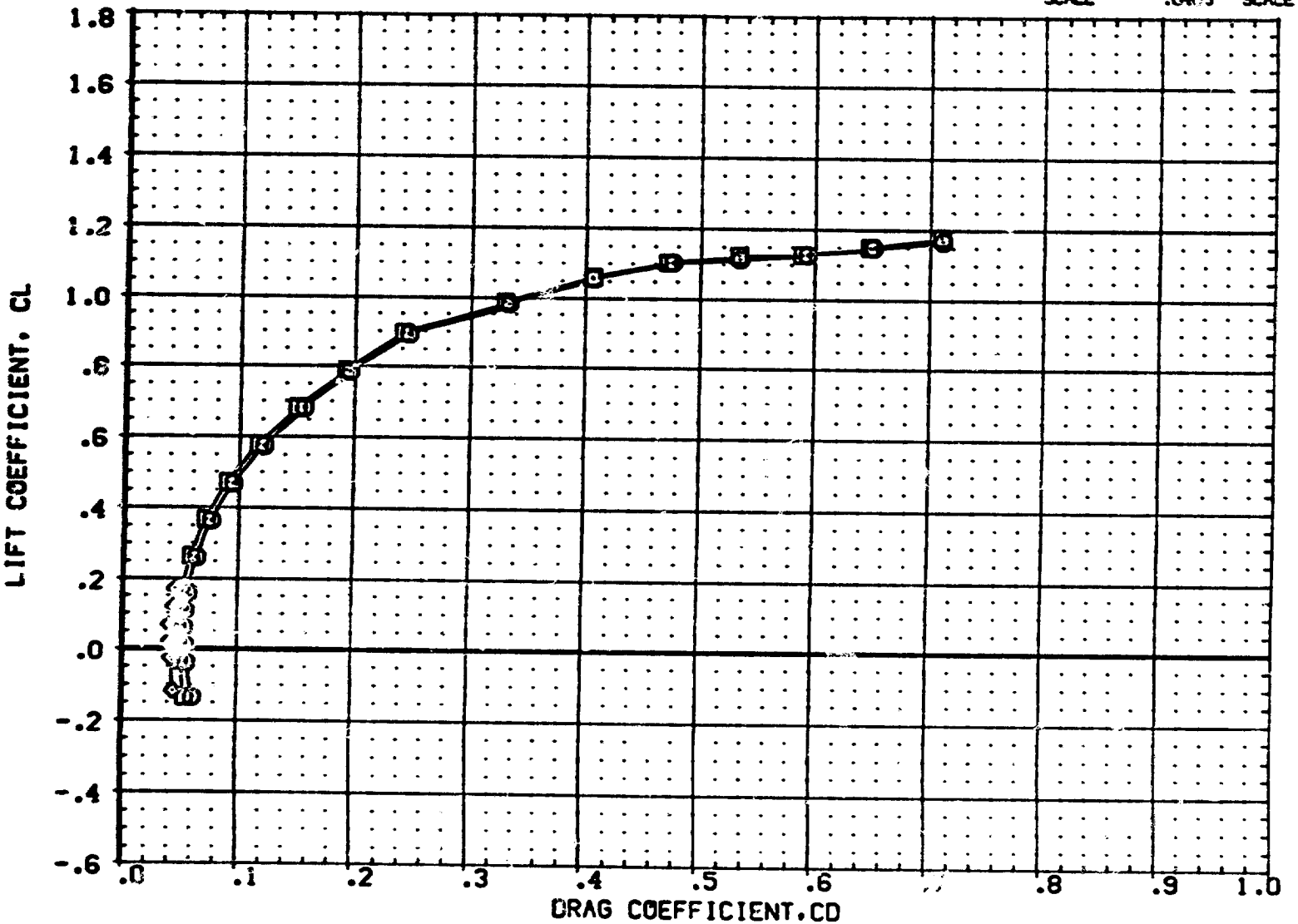


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

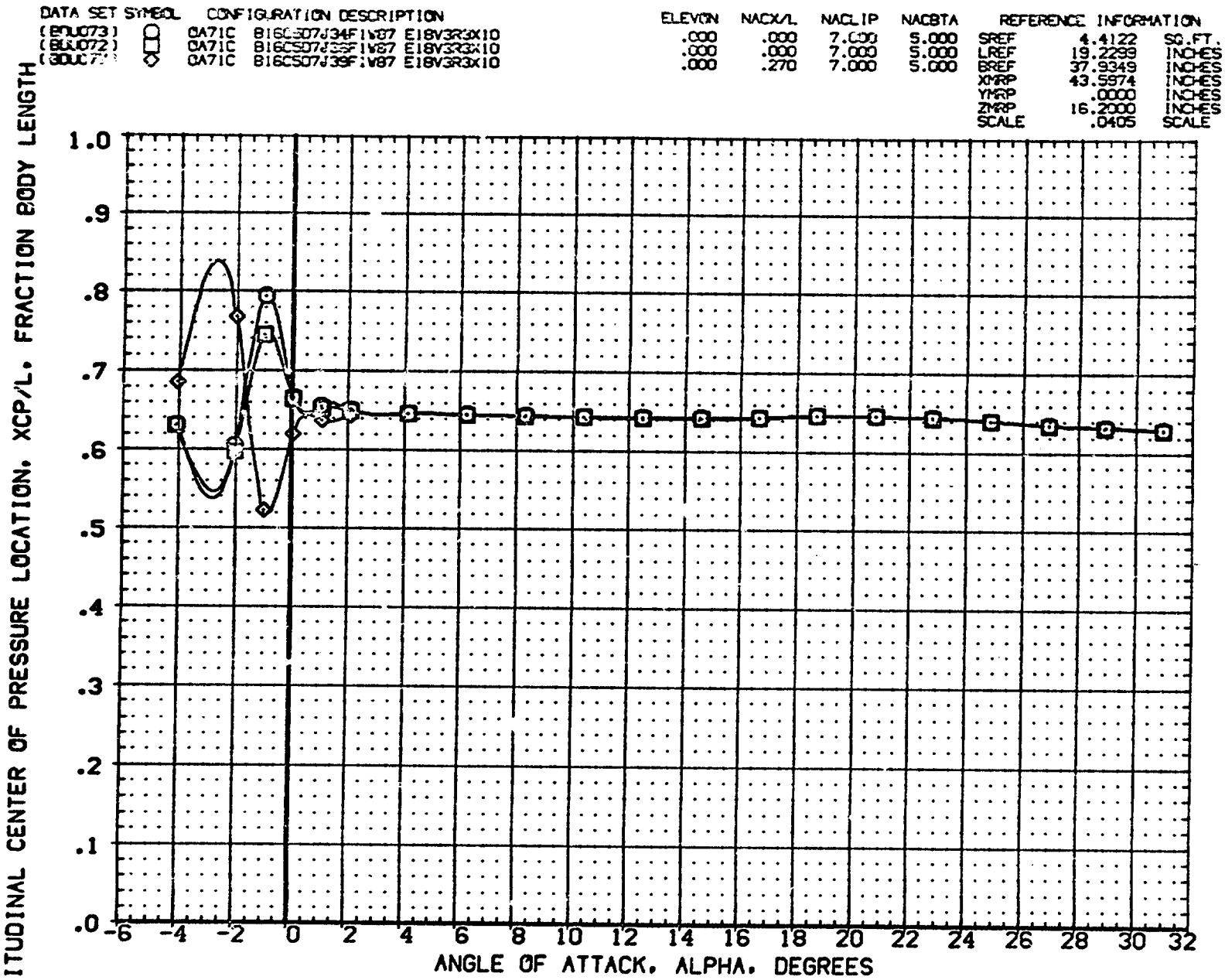


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(BDU073)	○	OA71C B16CSD7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(BDU072)	□	OA71C B16CSD7J33F1V87 E18V3R3X10	.000	.000	7.000	5.000
(BDU077)	◇	OA71C B16CSD7J33F1V87 E18V3P3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

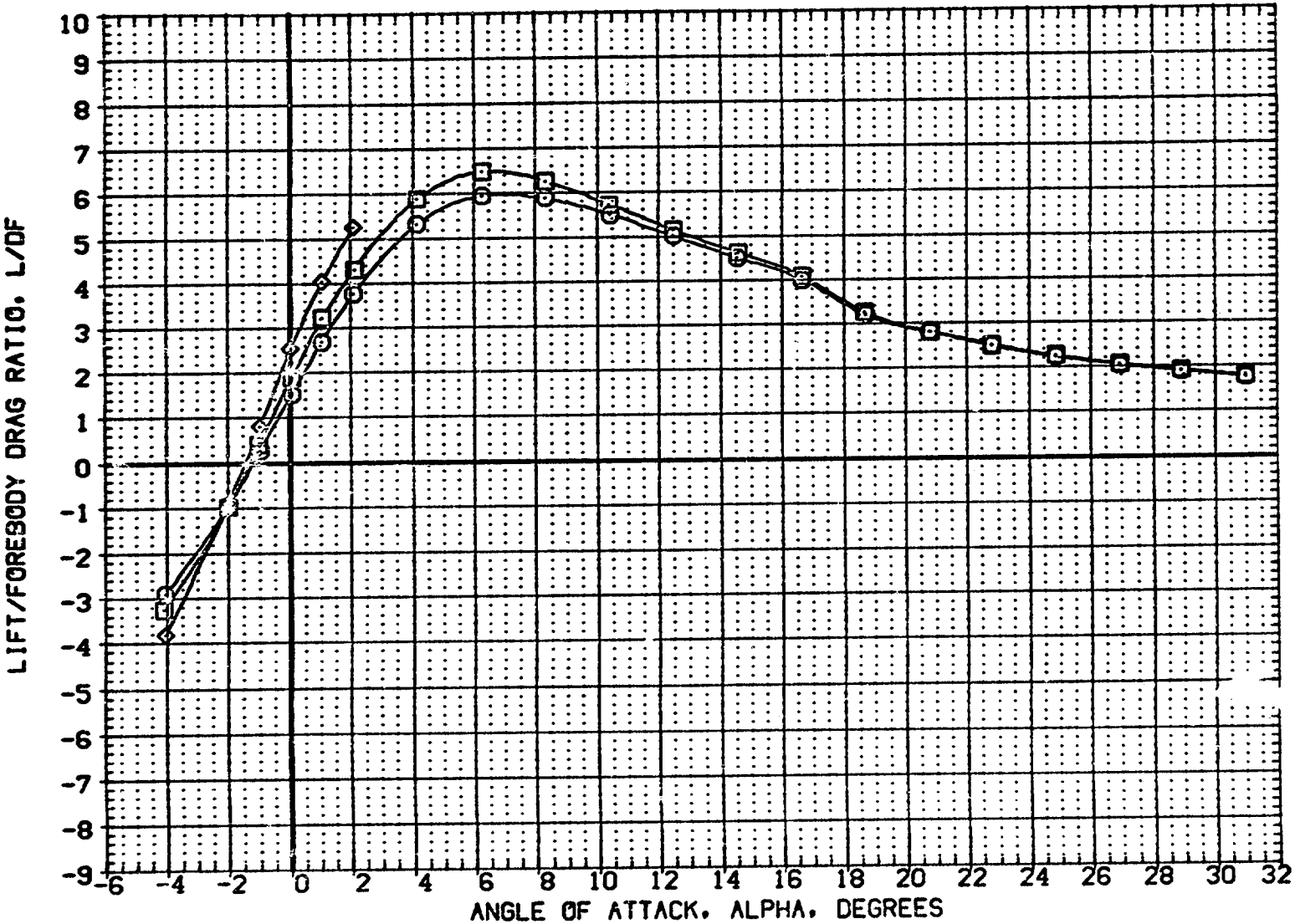


FIG 40 LONGITUDINAL CHARACTERISTICS - EFFECTS OF INDIVIDUAL CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU074)	○	CA71C B16C507J37F1V87 E18V3R3X10	.000	.000	.000	5.000
(ADU075)	□	CA71C B16C507J33F1V87 E18V3R3X10	.000	.530	.000	5.000
(ADU076)	◇	CA71C B16C507J33F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

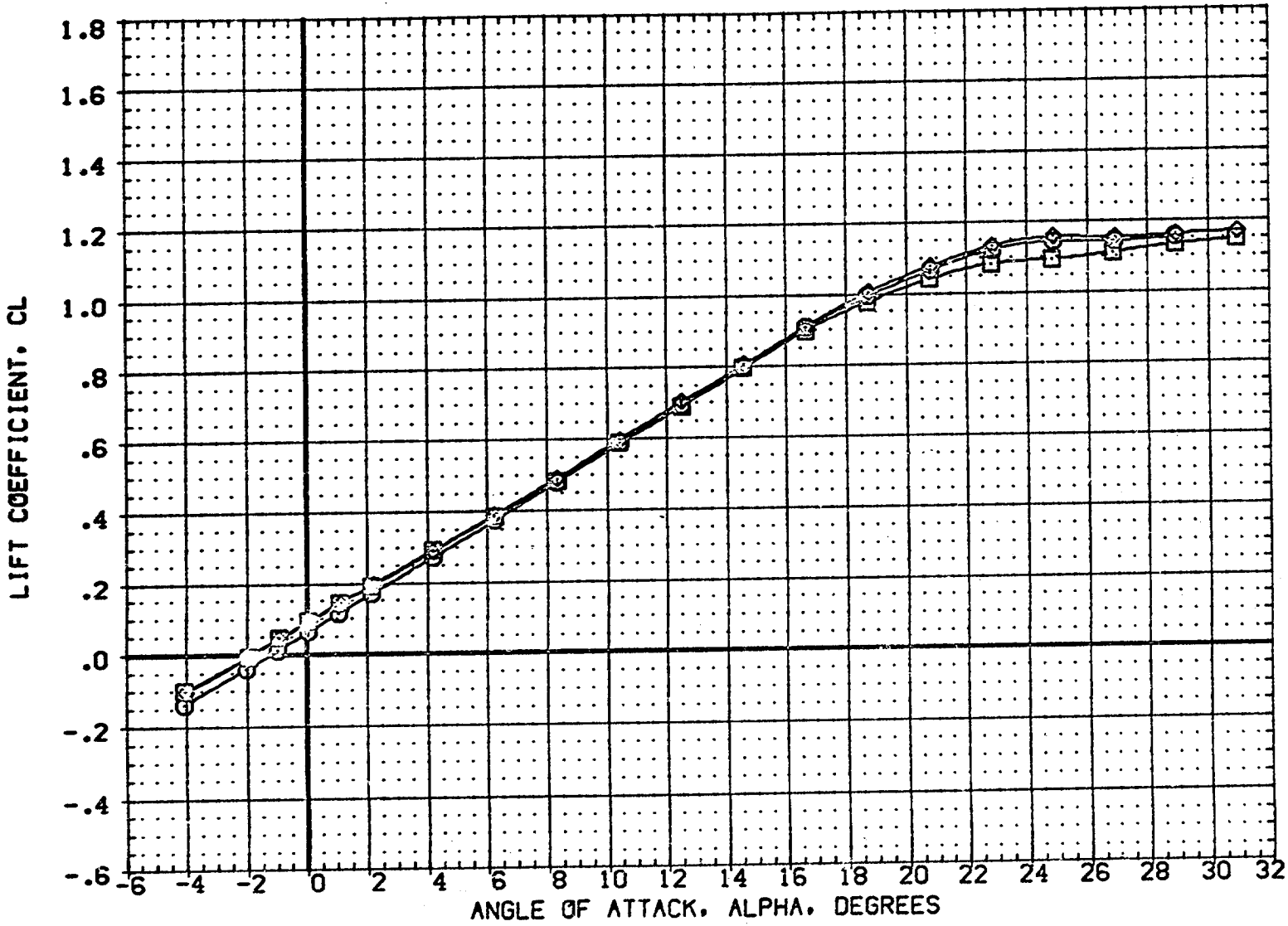


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL OF CLUSTERS

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU074) ○	0A71C B16C507J37F1V87 E18V3R3X10	.000	.000	.000	5.000
(ADU075) □	0A71C B16C507J38F1V87 E18V3R3X10	.000	.530	.000	5.000
(ADU075) ◇	0A71C B16C507J38F1V87 E16V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2239	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

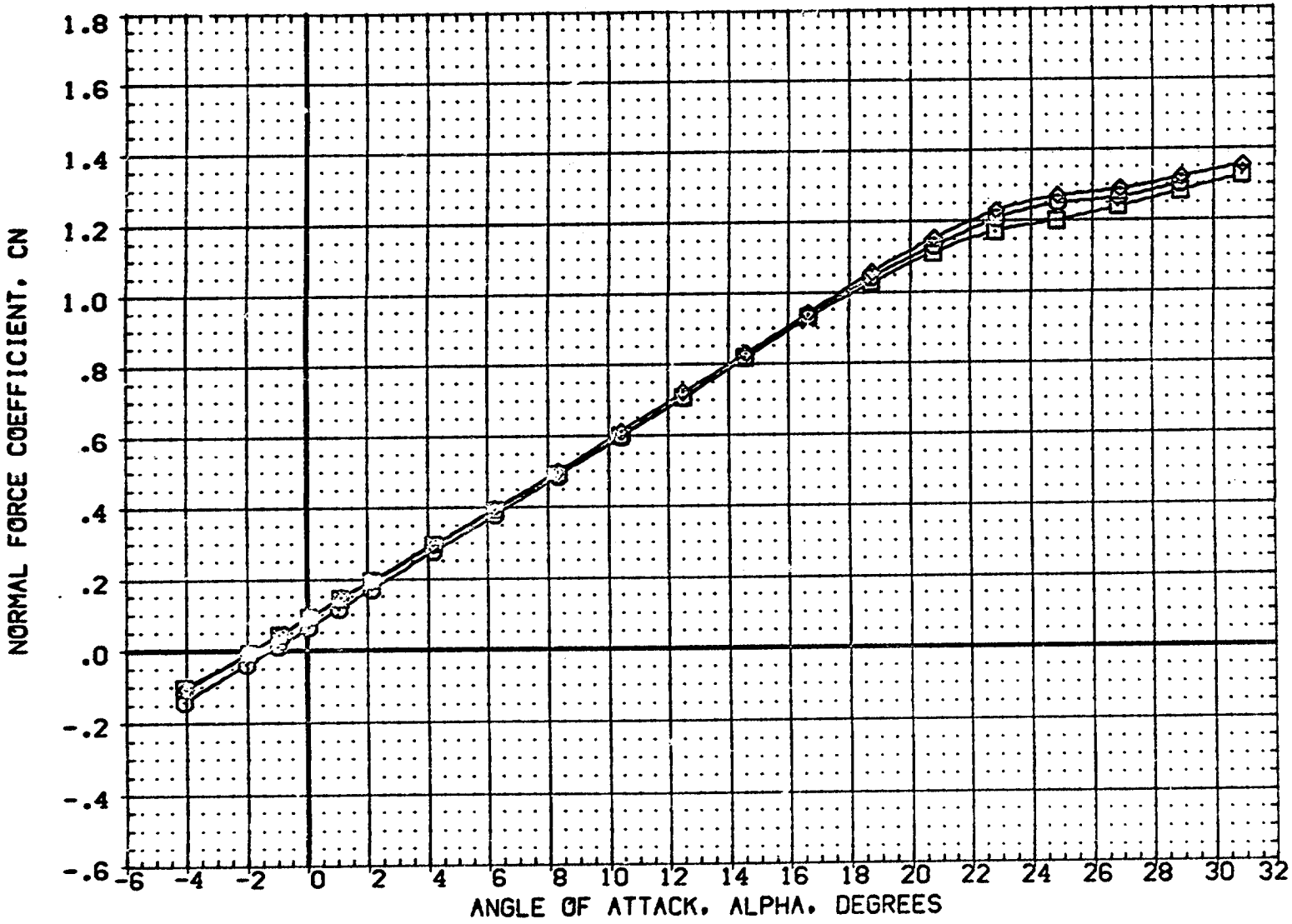


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL OF CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ADU074)	○	0A71C B16C507J37F1V87 E18V3R3X10
(ADU075)	□	0A71C B16C507J3SF1V87 E18V3R3X10
(ADU076)	◇	0A71C B16C507J3SF1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
.000	.000	.000	5.000
.000	.530	.000	5.000
.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

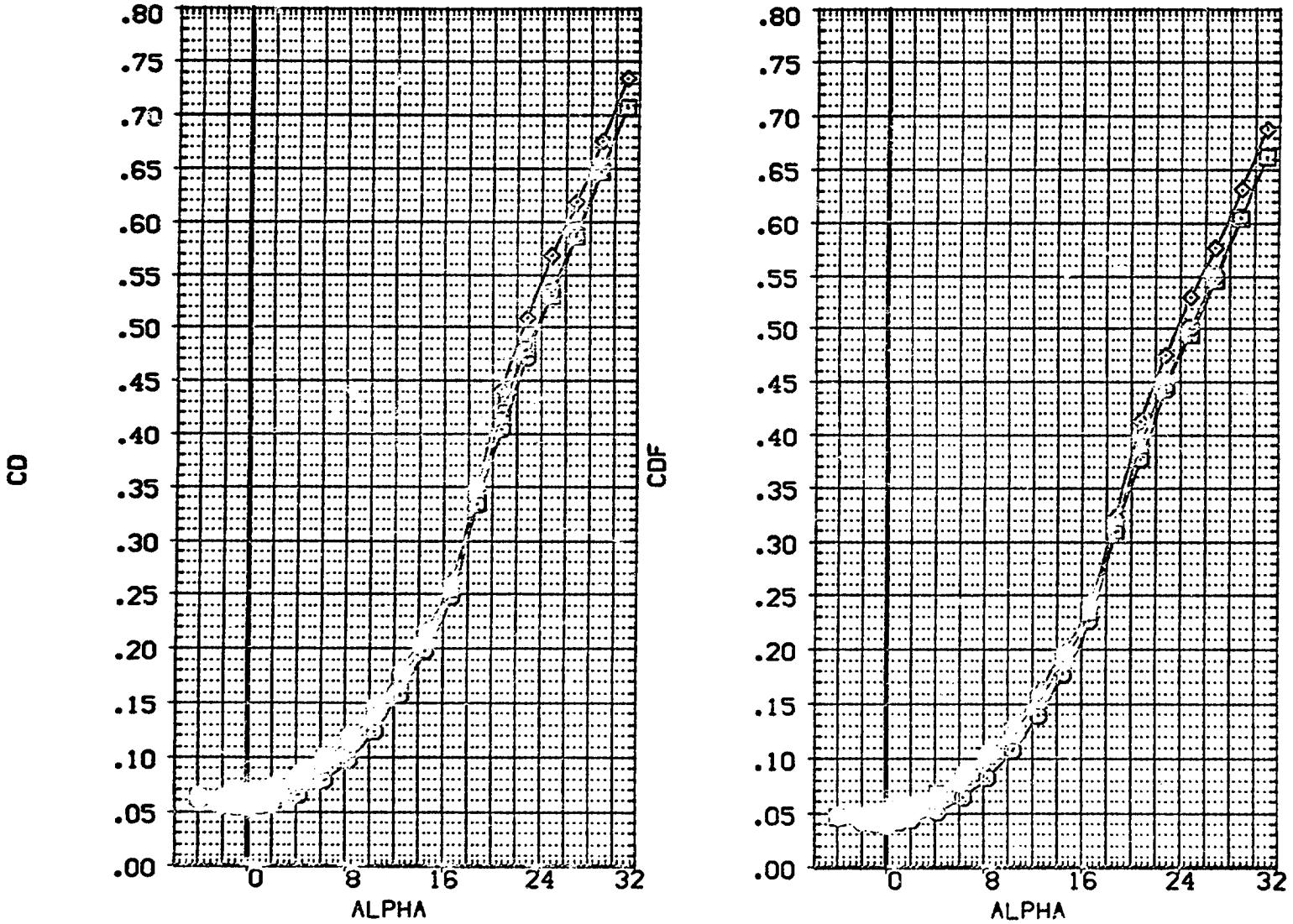


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL OF CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU074)	○	0A71C B16C507J37F1W87 E18V3R3X10	.000	.000	.000	5.000
(ADU075)	□	0A71C B16C507J35F1W87 E18V3R3X10	.000	.530	.000	5.000
(ADU076)	◇	0A71C B16C507J36F1W87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

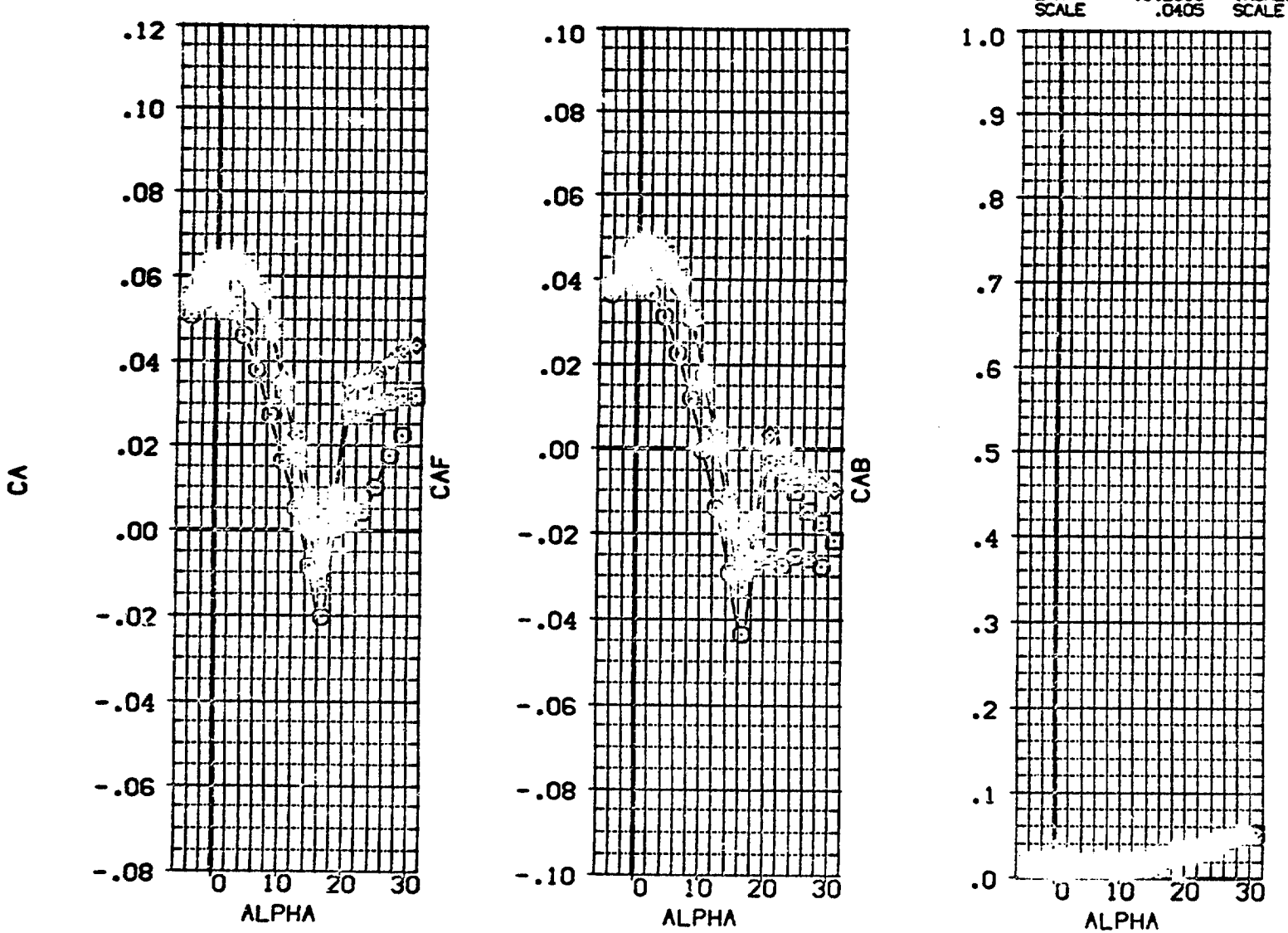


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL OF CLUSTERS

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ADU074)	0A71C B16C5D7J37F1V37 E18V3R3X10
(ADU075)	0A71C B16C5D7J33F1V87 E18V3R3X10
(ADU076)	0A71C B16C5D7J38F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
.000	.000	.000	5.000
.000	.530	.000	5.000
.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

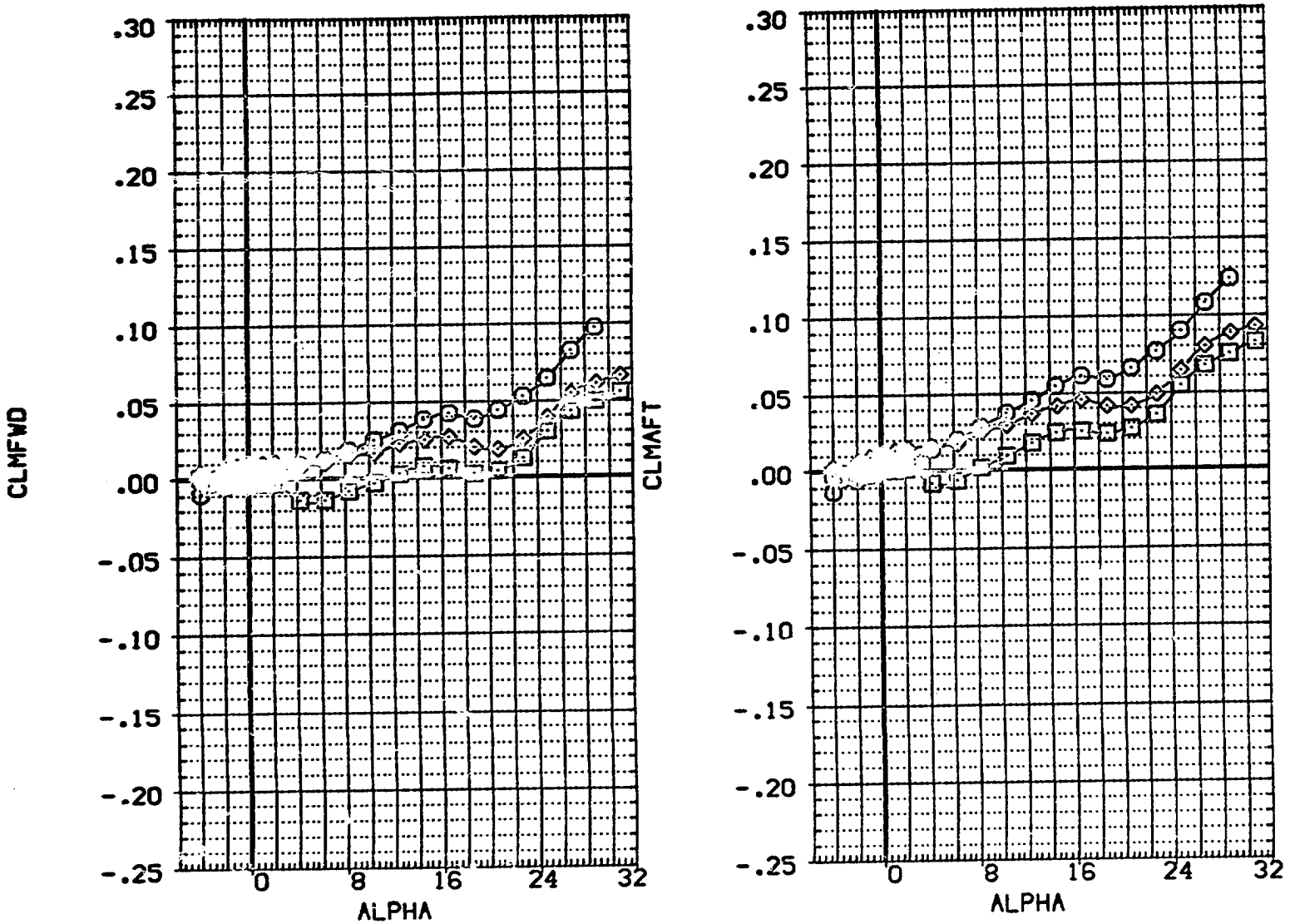


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL OF CLUSTERS

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU074) ○	0A71C B16C5D7J37F1V87 E18V3R3X10	.000	.000	.000	5.000
(ADU075) □	0A71C B16C5D7J33F1V87 E18V3R3X10	.000	.530	.000	5.000
(ADU076) ◇	0A71C B16C5D7J39F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	13.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

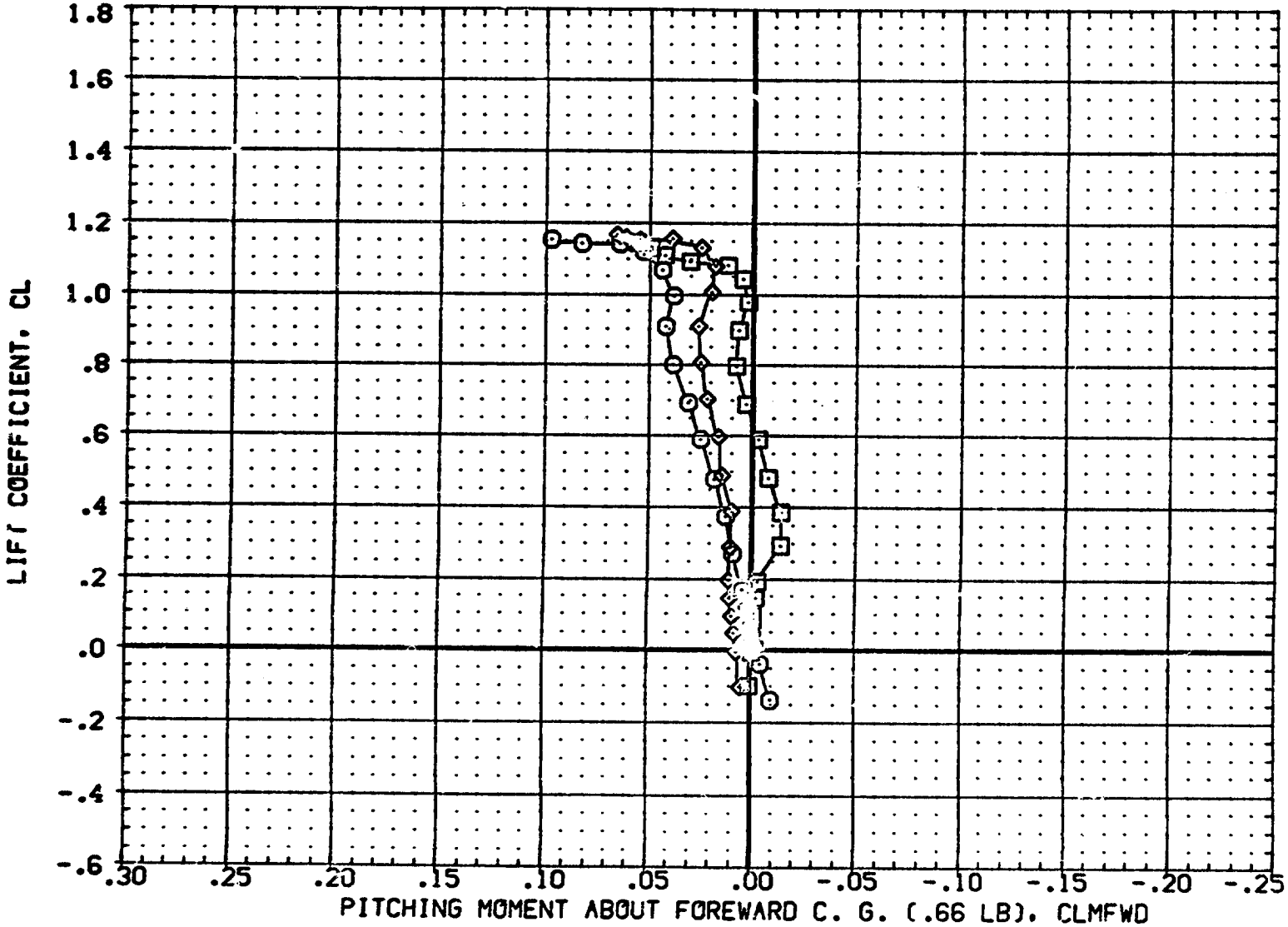


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL OF CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU074)	○	0A71C B16CS07J37F1V87 E18V3R3X10	.000	.000	.000	5.000
(ADU075)	□	0A71C B16CS07J38F1V87 E18V3R2X10	.000	.530	.000	5.000
(ADU076)	◇	0A71C B16CS07J38F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

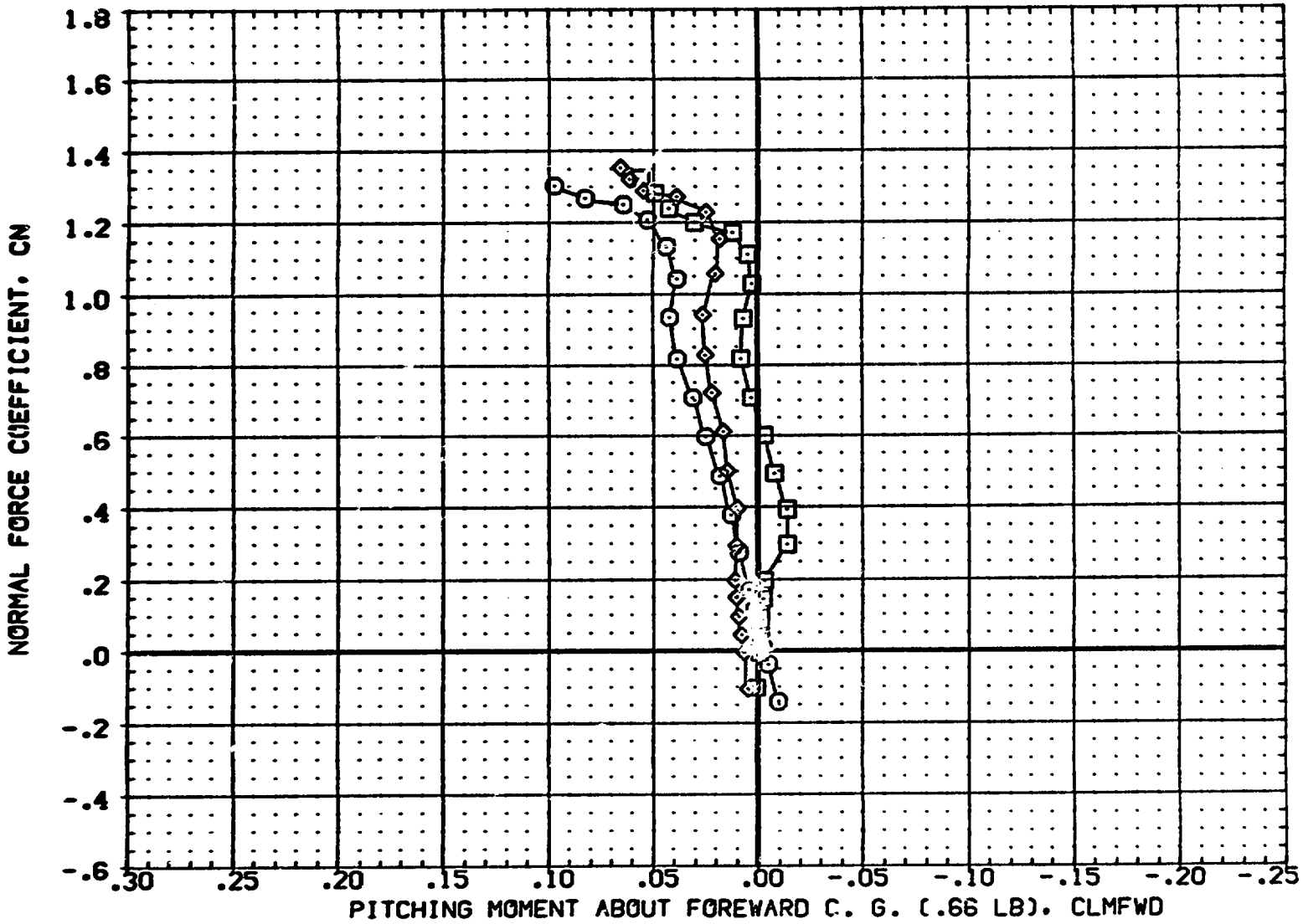


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL-OF CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU074)	○	0A71C B16CS07J37F1V87 E18V3R3X10	.000	.000	.000	5.000
(ADU075)	□	0A71C B16CS07J33F1V87 E18V3R3X10	.000	.530	.000	5.000
(ADU076)	◇	0A71C B16CS07J38F1V87 E18V3R3X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

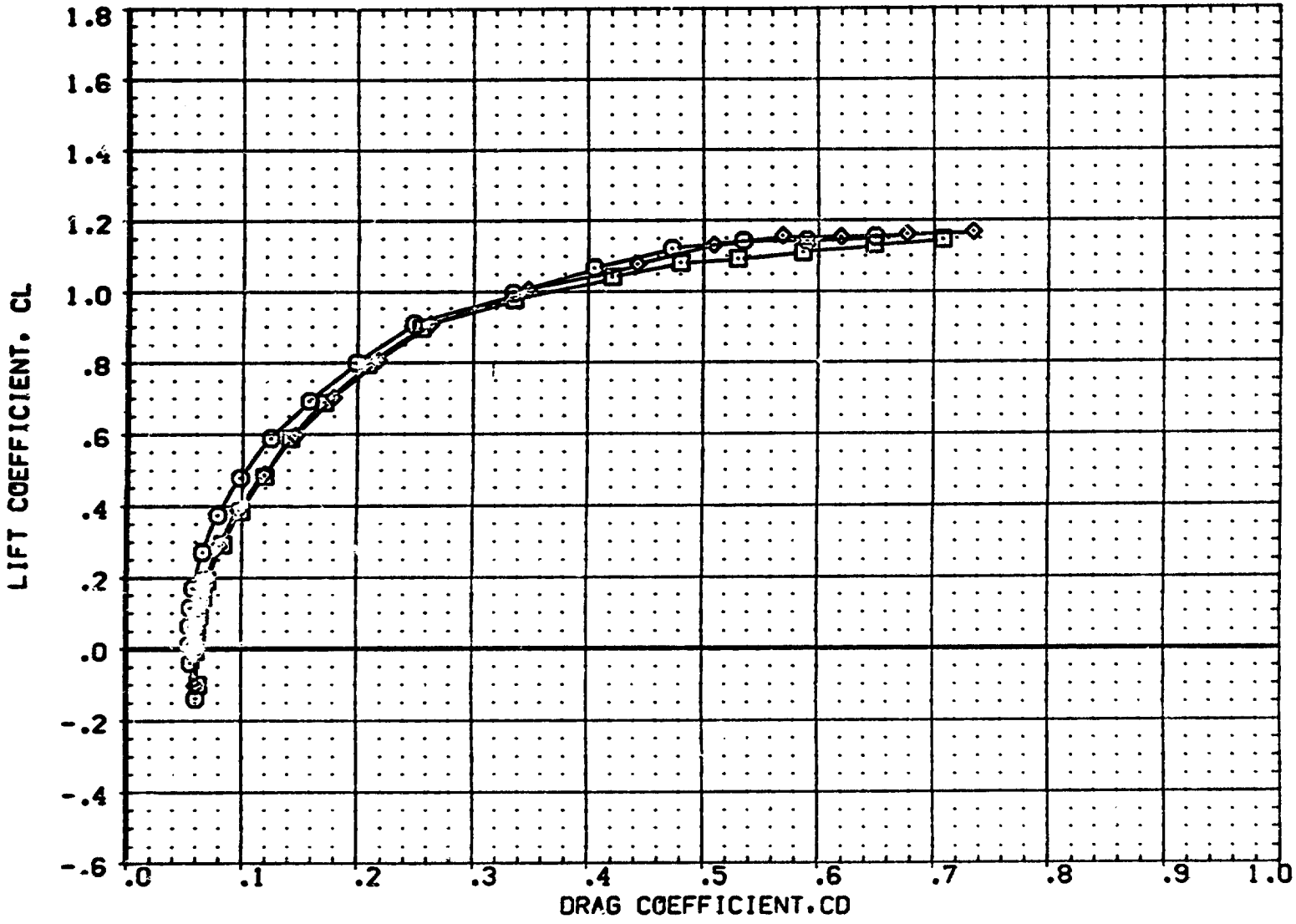


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL OF CLUSTERS

(A)MACH = .20

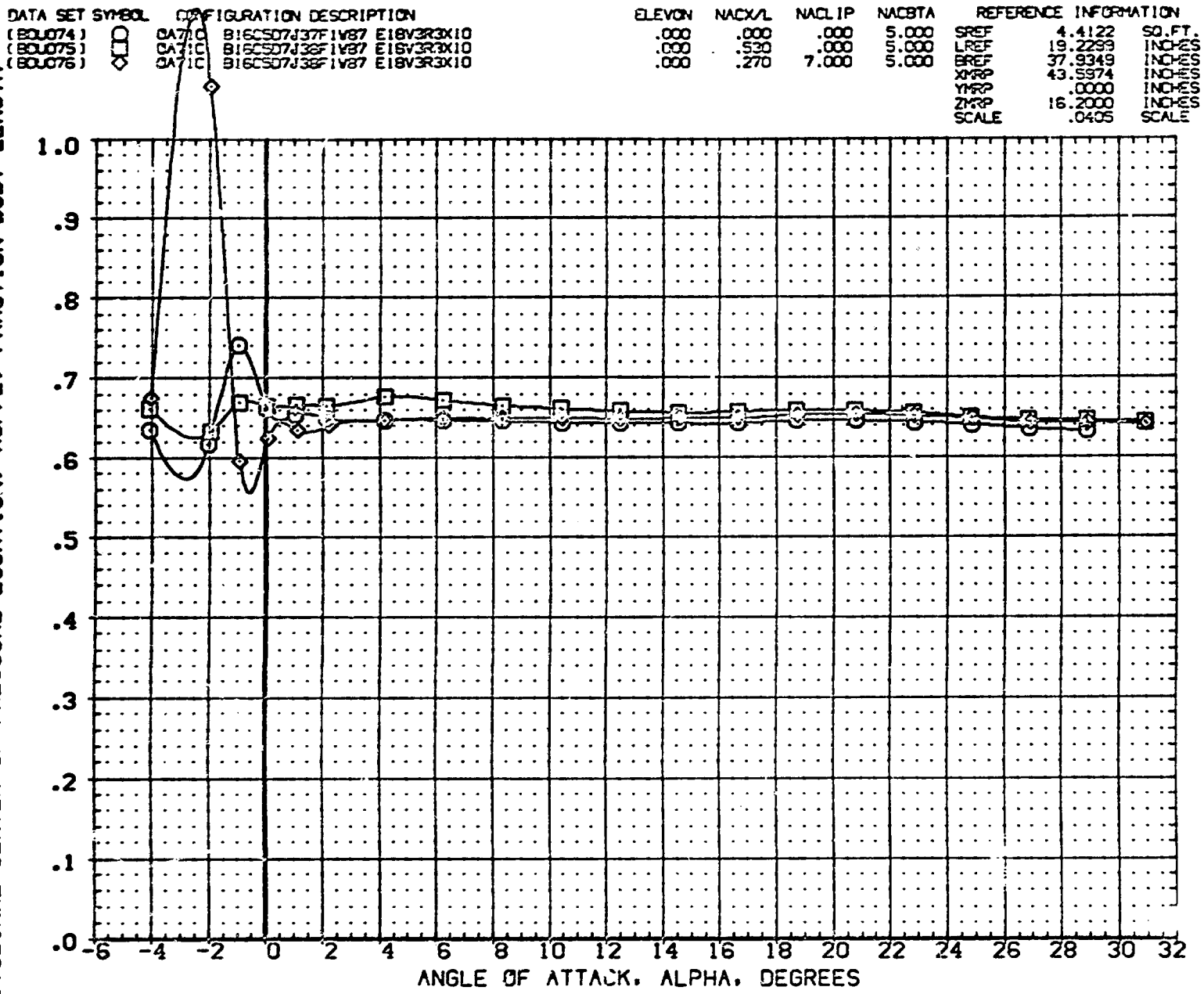


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL OF CLUSTERS

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(BDU074) ○	DA71C B16CSD7J37F1V87 E16V3R3X10	.000	.000	.000	5.000
(BDU075) □	DA71C B16CSD7J33F1V87 E16V3R3X10	.000	.530	.000	5.000
(BDU076) ◇	DA71C B16CSD7J39F1V97 E16V3R2X10	.000	.270	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	27.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

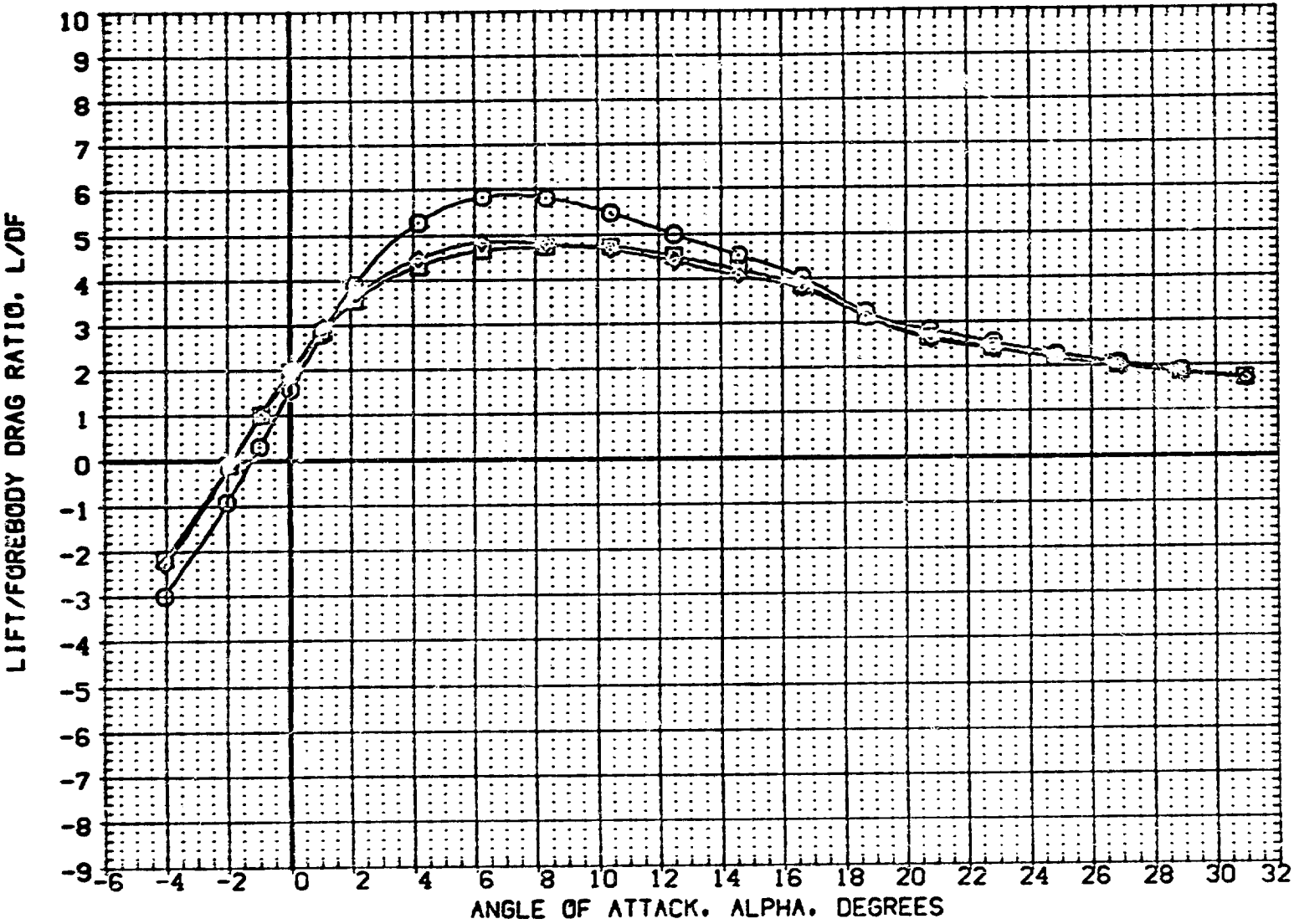


FIG 41 LONGITUDINAL CHARACTERISTICS - EFFECTS OF SHELL OF CLUSTERS

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACSTA
(ADU001)	CA71C B16C5D7 F1V87 E18V3R3X9	.000			
(ADU037)	CA71C B16C5D7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU046)	CA71C B16C5D7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(ADU049)	CA71C B16C5D7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

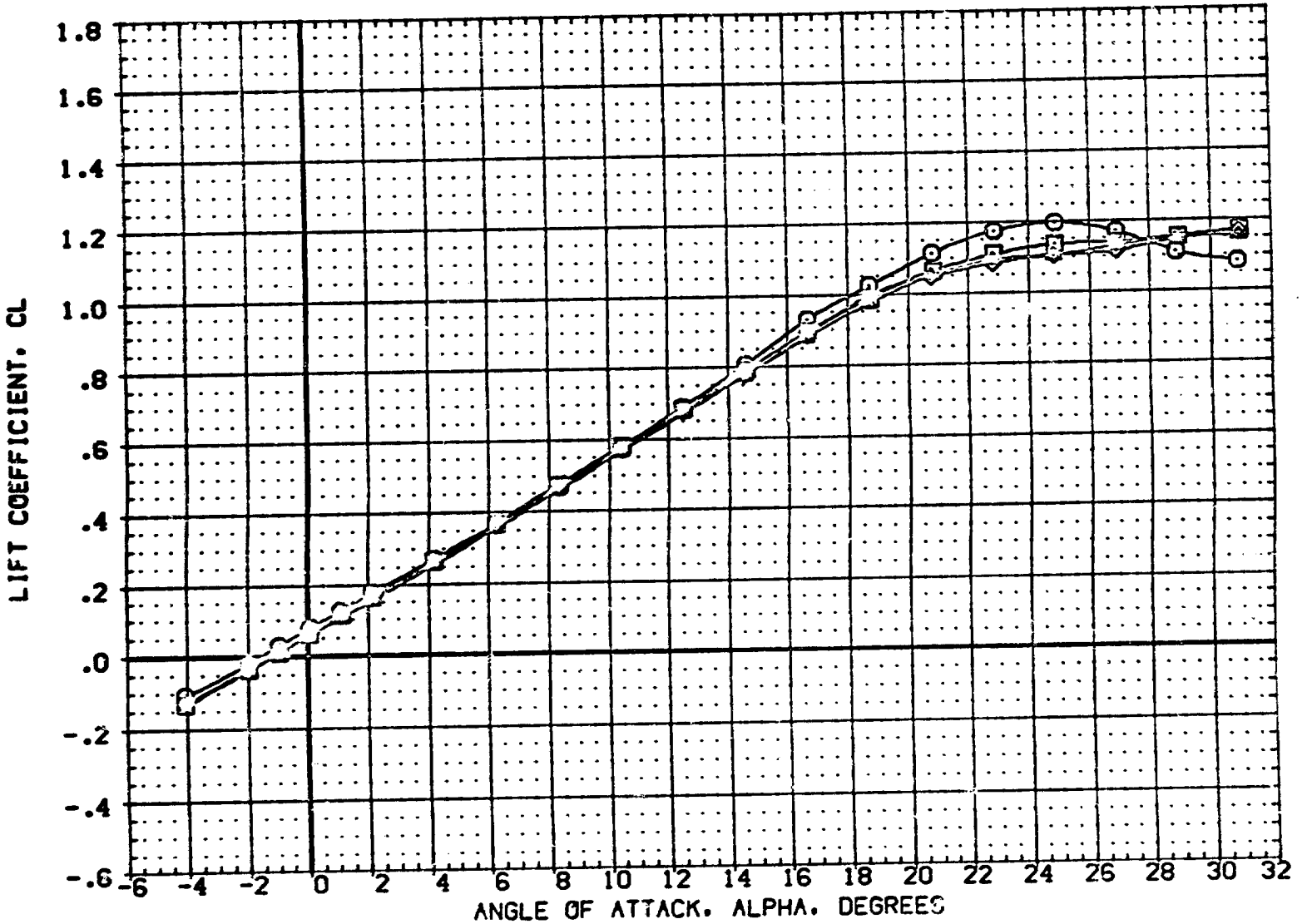


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	□	CA71C B16CSD7 F1V87 E18V3R3X9	.000			
(ADU037)	◇	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU046)	◇	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(ADU049)	△	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

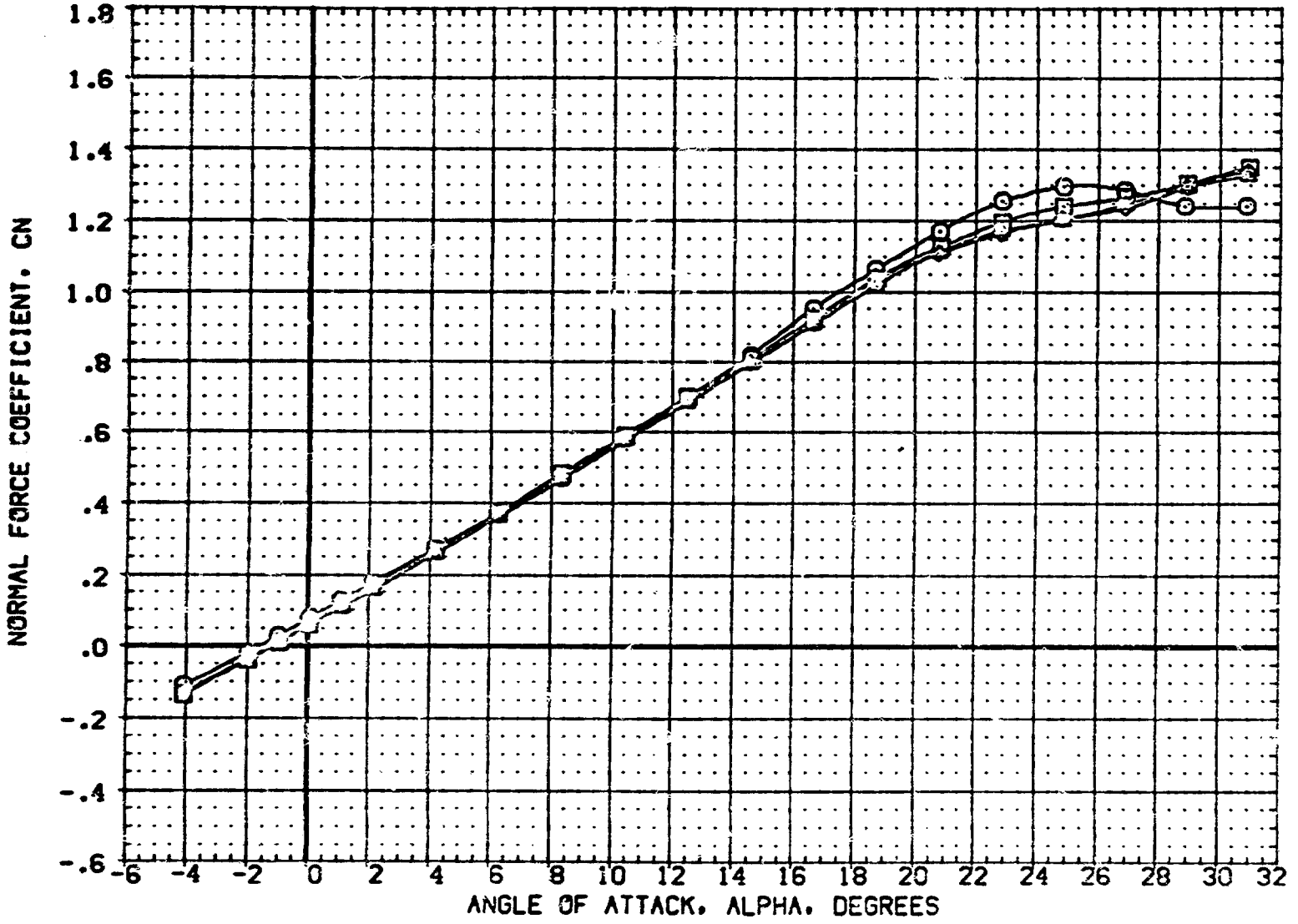


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ADU001)	0A71C B16C507 F1V87 E18V3R3X9
(ADU037)	0A71C B16C507J34F1V87 E18V3R3X10
(ADU046)	0A71C B16C507J34F1V87 E18V3R3X10
(ADU049)	0A71C B16C507J34F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
.000			
.000	.000	7.000	5.000
.000	.270	7.000	5.000
.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.040S	SCALE

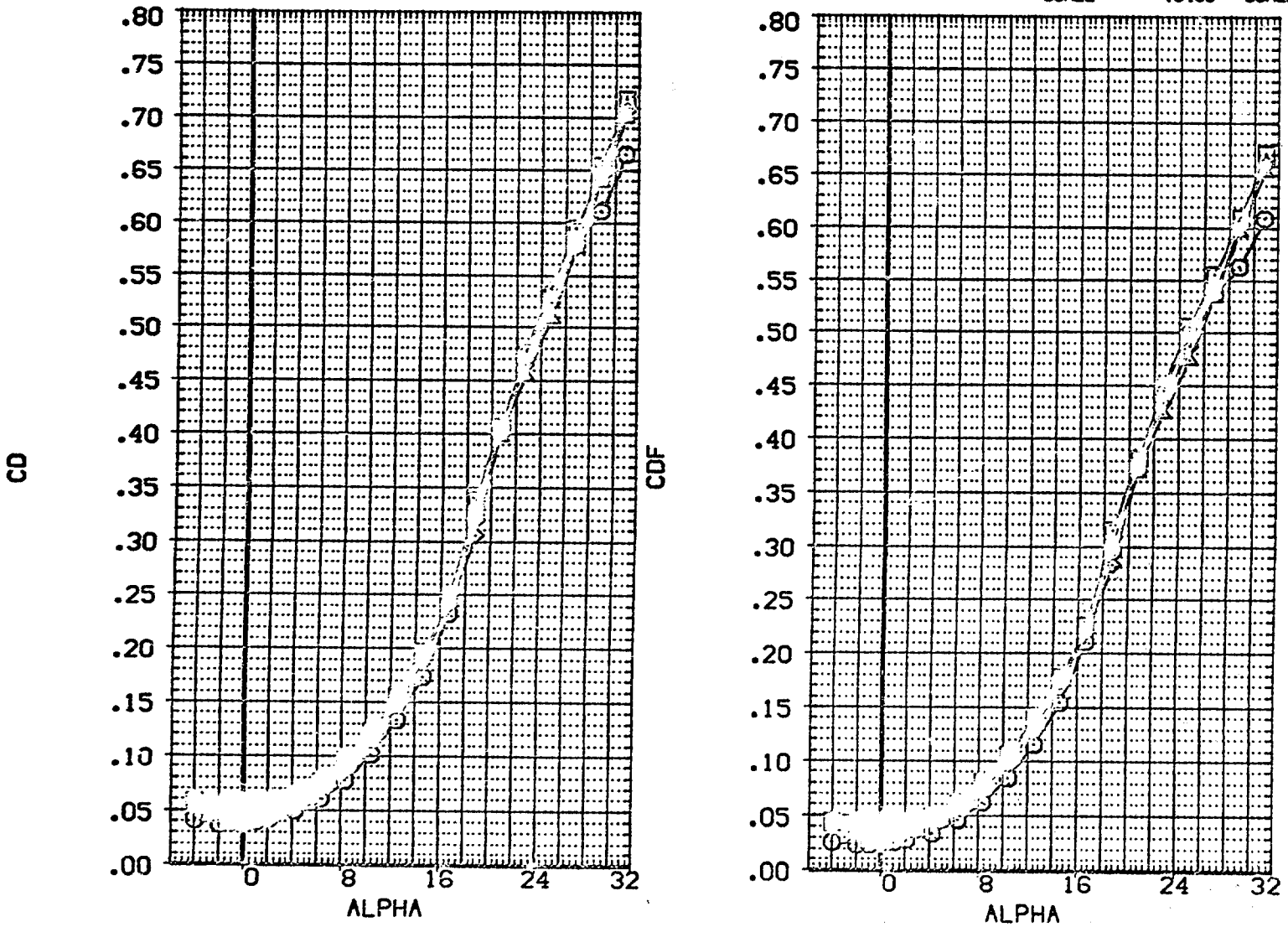


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	□	CA71C B16C5D7 F1V87 E18V3R3X9	.000			
(ADU037)	□	CA71C B16C5D7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU046)	◇	CA71C B16C5D7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(ADU049)	△	CA71C B16C5D7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

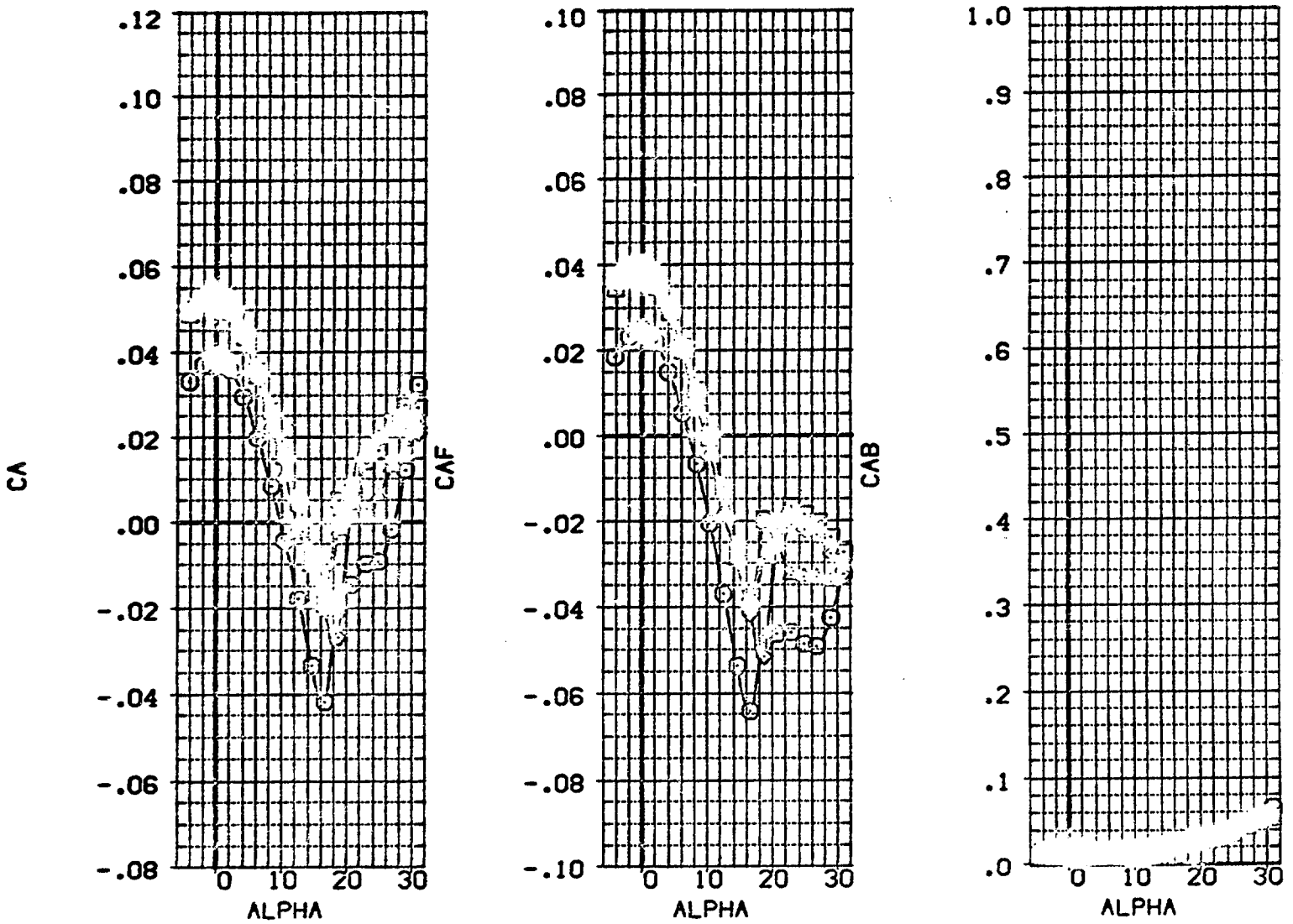


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	○	CA71C B16CSD7 F1V87 E18V3R3X9	.000			
(ADU037)	□	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU046)	◇	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(ADU049)	△	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

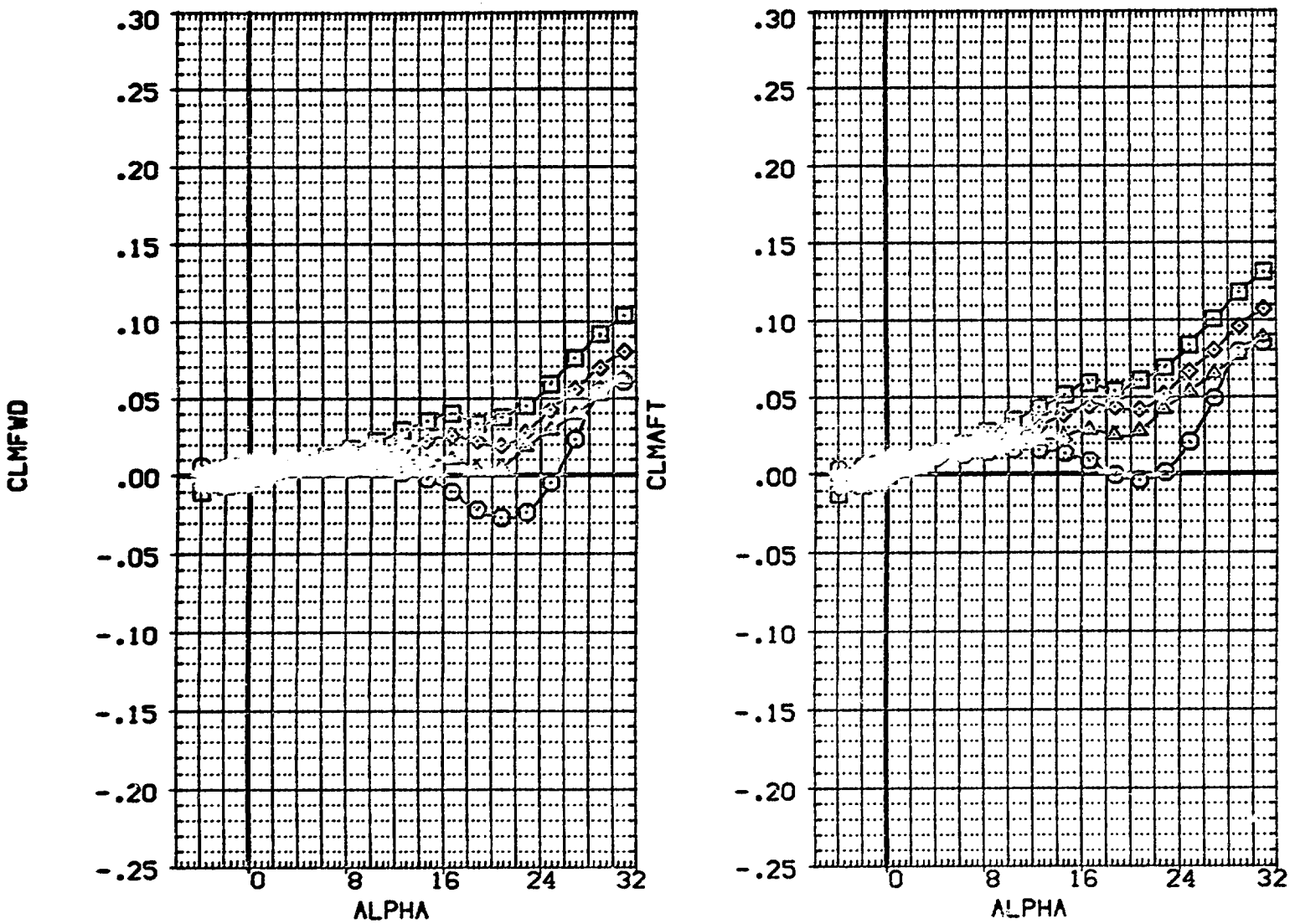


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	□	CA71C B16C5D7 F1V87 E18V3R3X9	.000			
(ADU037)	○	CA71C B16C5D7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU046)	◇	CA71C B16C5D7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(ADU049)	△	CA71C B16C5D7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2239	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

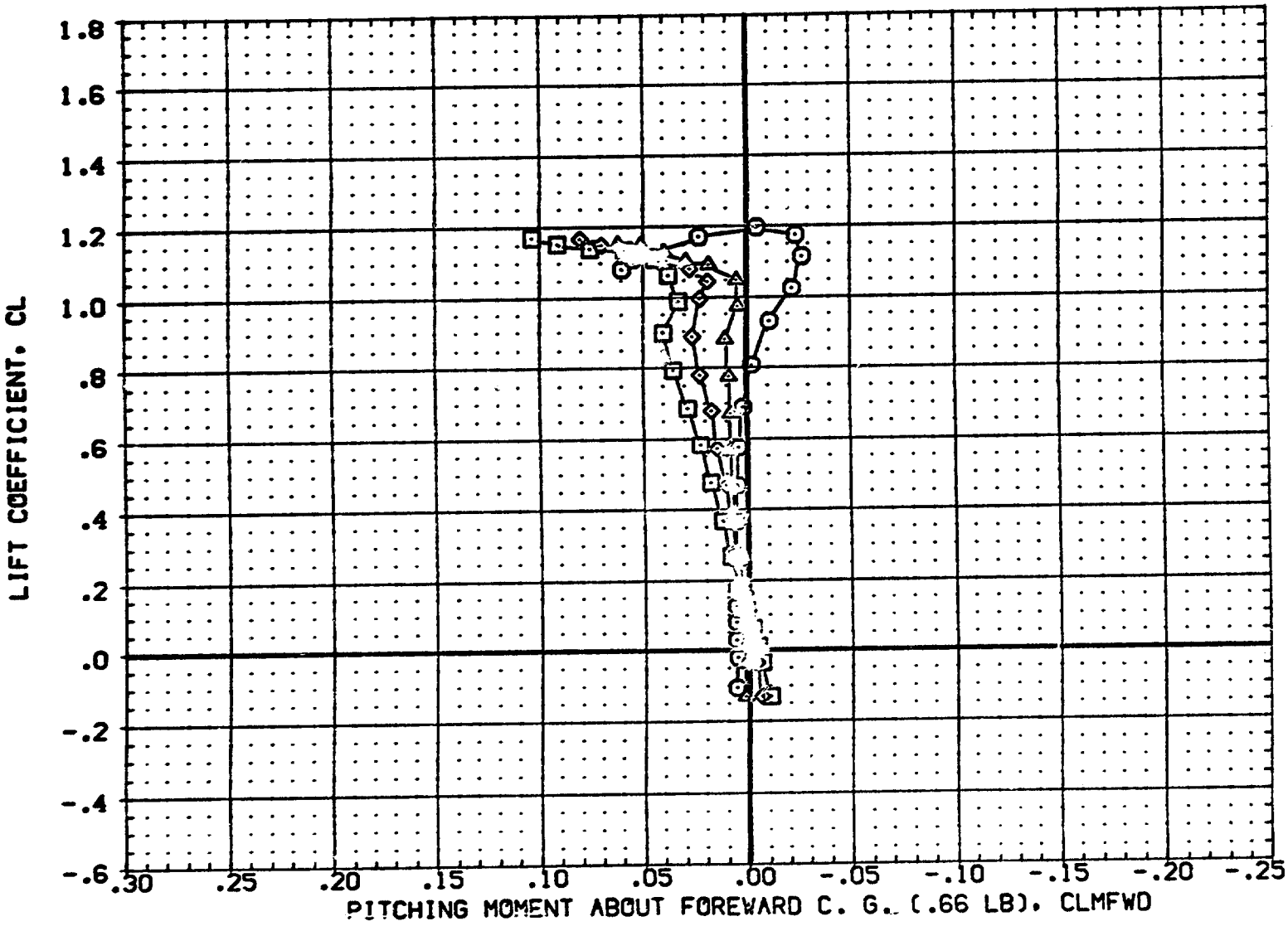


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	□	CA71C B16CSD7 F1V87 E18V3R3X9	.000			
(ADU037)	□	CA71C B16CSD7J34F1V87 E15V3R3X10	.000	.000	7.000	5.000
(ADU045)	◇	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(ADU049)	△	CA71C B16CSD7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

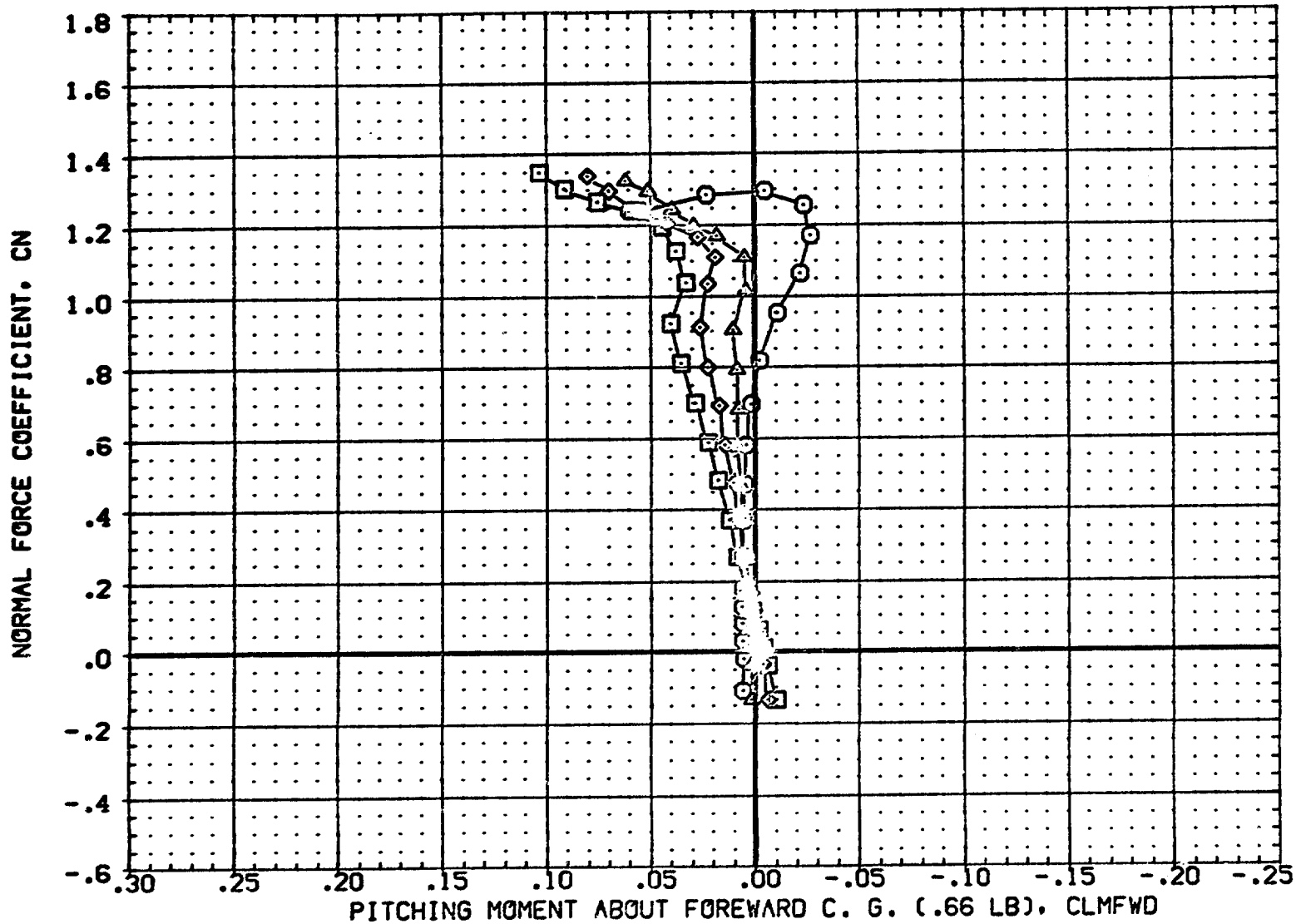


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	○	0A71C B16CSD7 F1V87 E18V3R3X9	.000			
(ADU037)	□	0A71C B16CSD7J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU046)	⊠	0A71C B16CSD7J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(ADU049)	△	0A71C B16CSD7J34F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

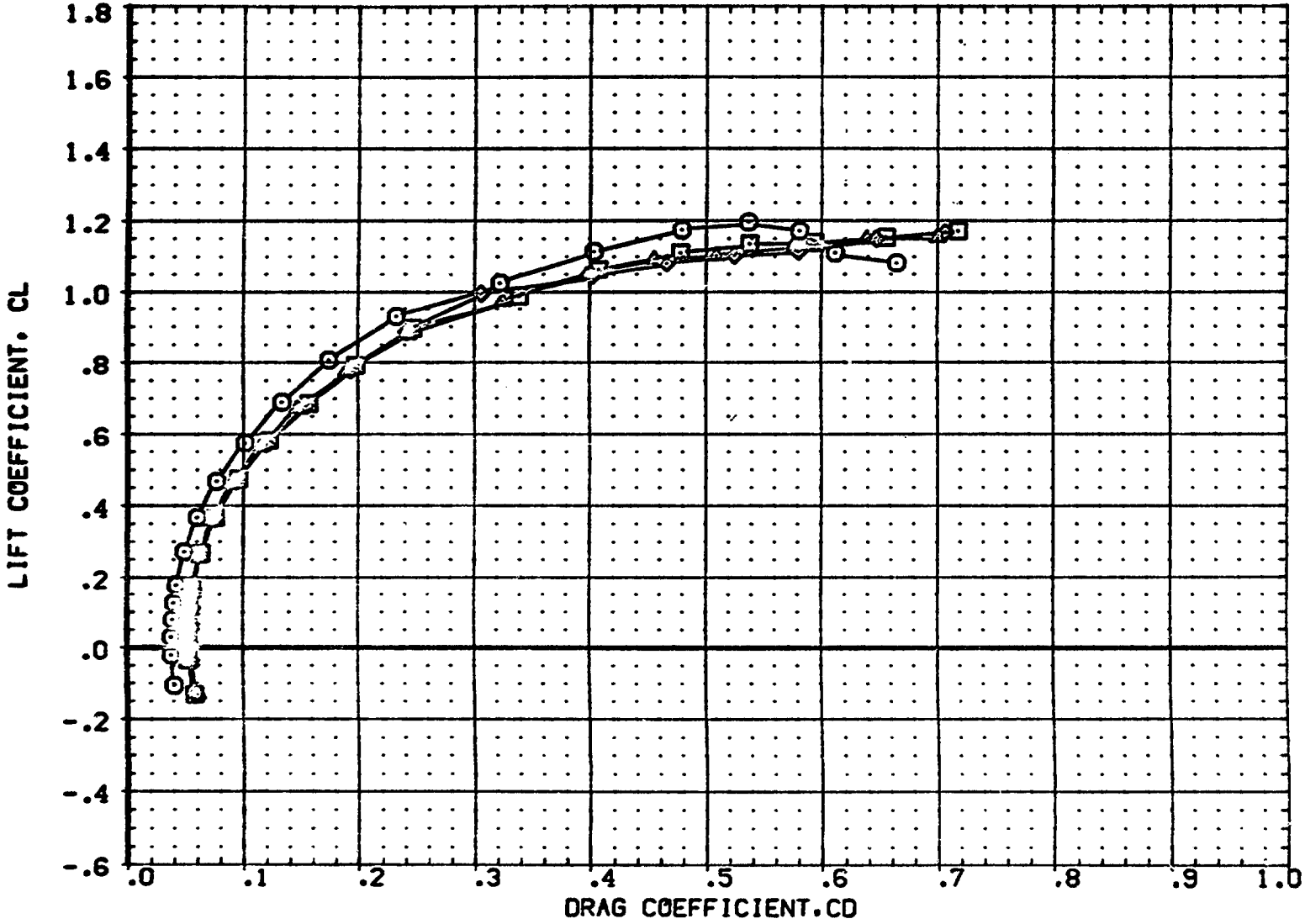


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(EDU001)	□	CA71C B16C507 F1W87 E18V3R3X9	.000			
(EDU037)	□	CA71C B16C507J34F1W87 E18V3R3X10	.000	.000	7.000	5.000
(EDU046)	⊠	CA71C B16C507J34F1W87 E18V3R3X10	.000	.270	7.000	5.000
(EDU049)	△	CA71C B16C507J34F1W87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2259	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

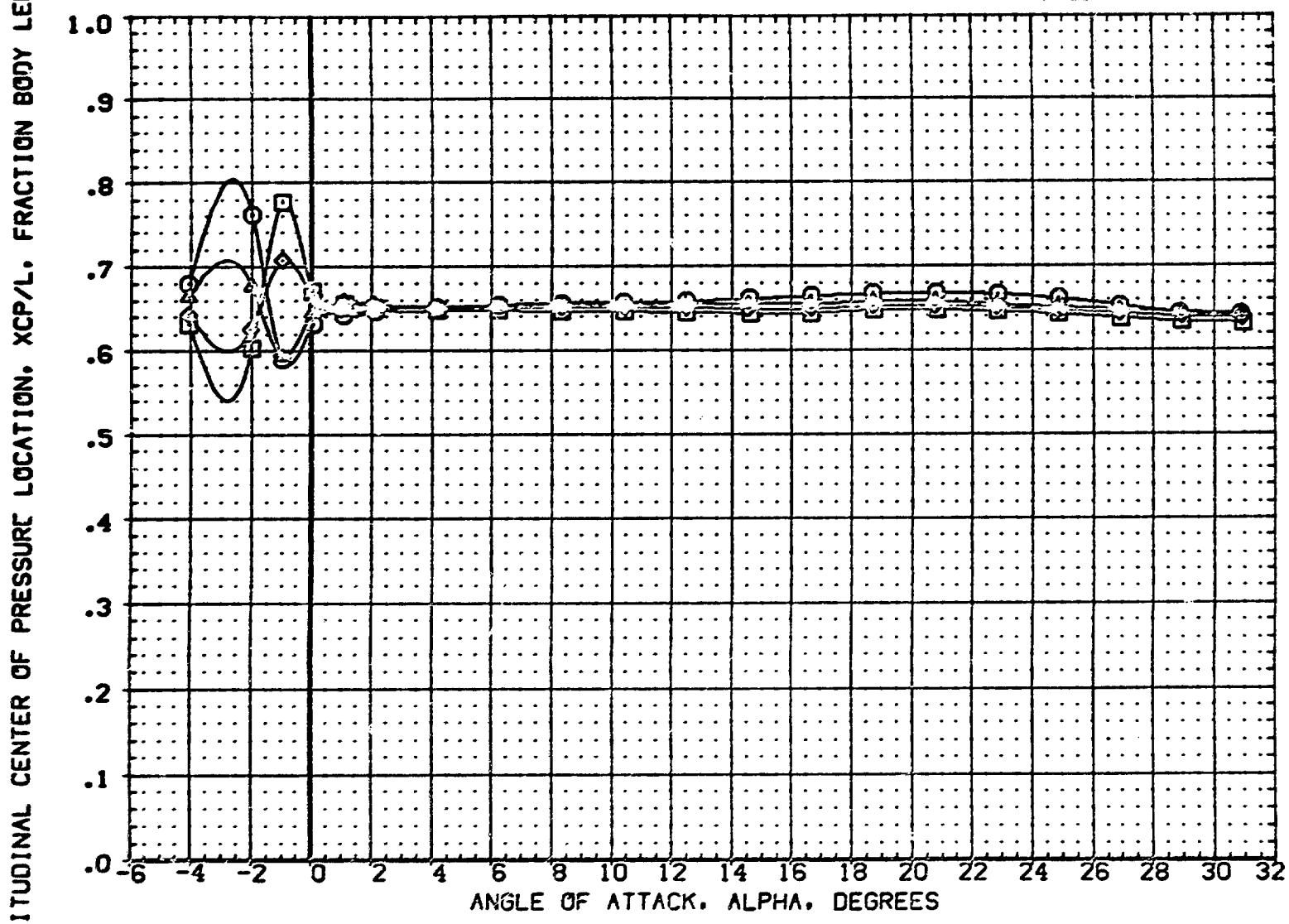


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(BDU001)	□	CA71C B16C507 F1V87 E18V3R3X9	.000			
(BDU037)	□	CA71C B16C507J34F1V87 E18V3R3X10	.000	.000	7.000	5.000
(BDU046)	◇	CA71C B16C507J34F1V87 E18V3R3X10	.000	.270	7.000	5.000
(BDU049)	△	CA71C B16C507J34F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

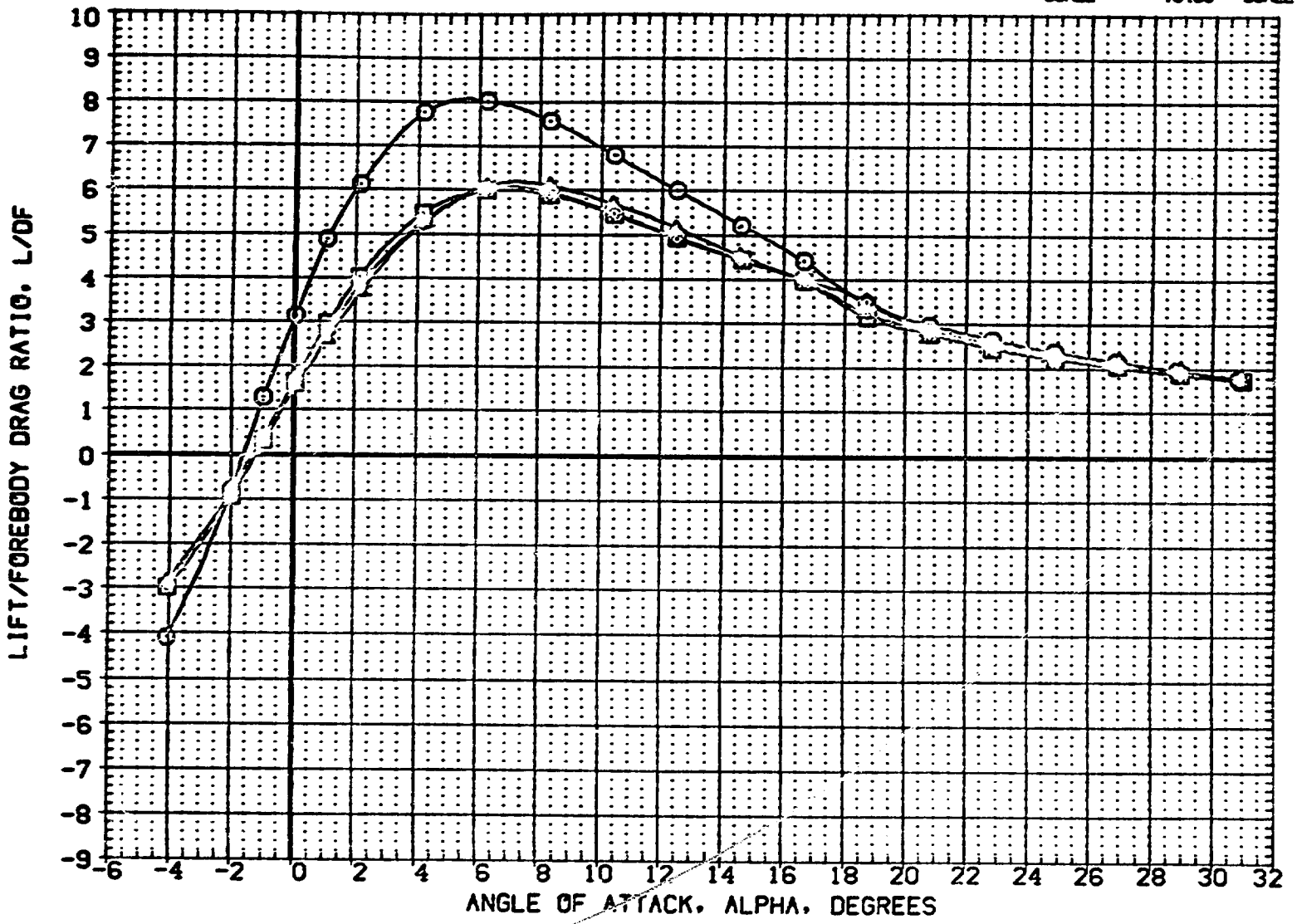


FIG 42 LONGITUDINAL CHARACTERISTICS - EFFECTS OF UNDERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	○	CA71C B16CSD7 F1V87 E18V3R3X9	.000			
(ADU067)	□	CA71C B16CSD7J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU058)	◇	CA71C B16CSD7J35F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5574	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

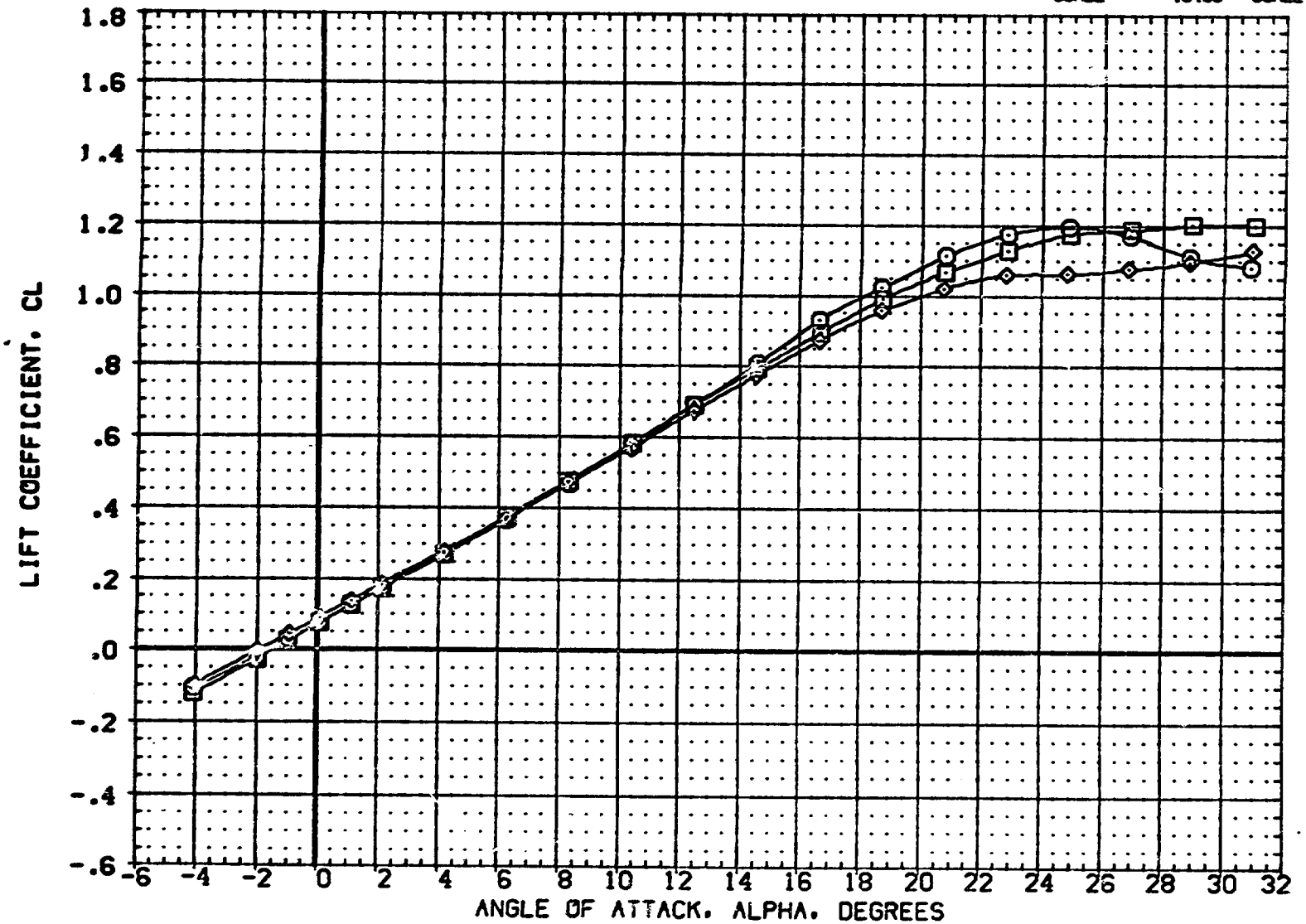


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	□	CA71C B16CS07 F1V87 E18V3R3X9	.000			
(ADU067)	◁▷	CA71C B16CS07J3SF1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU058)	◇	CA71C B16CS07J3SF1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

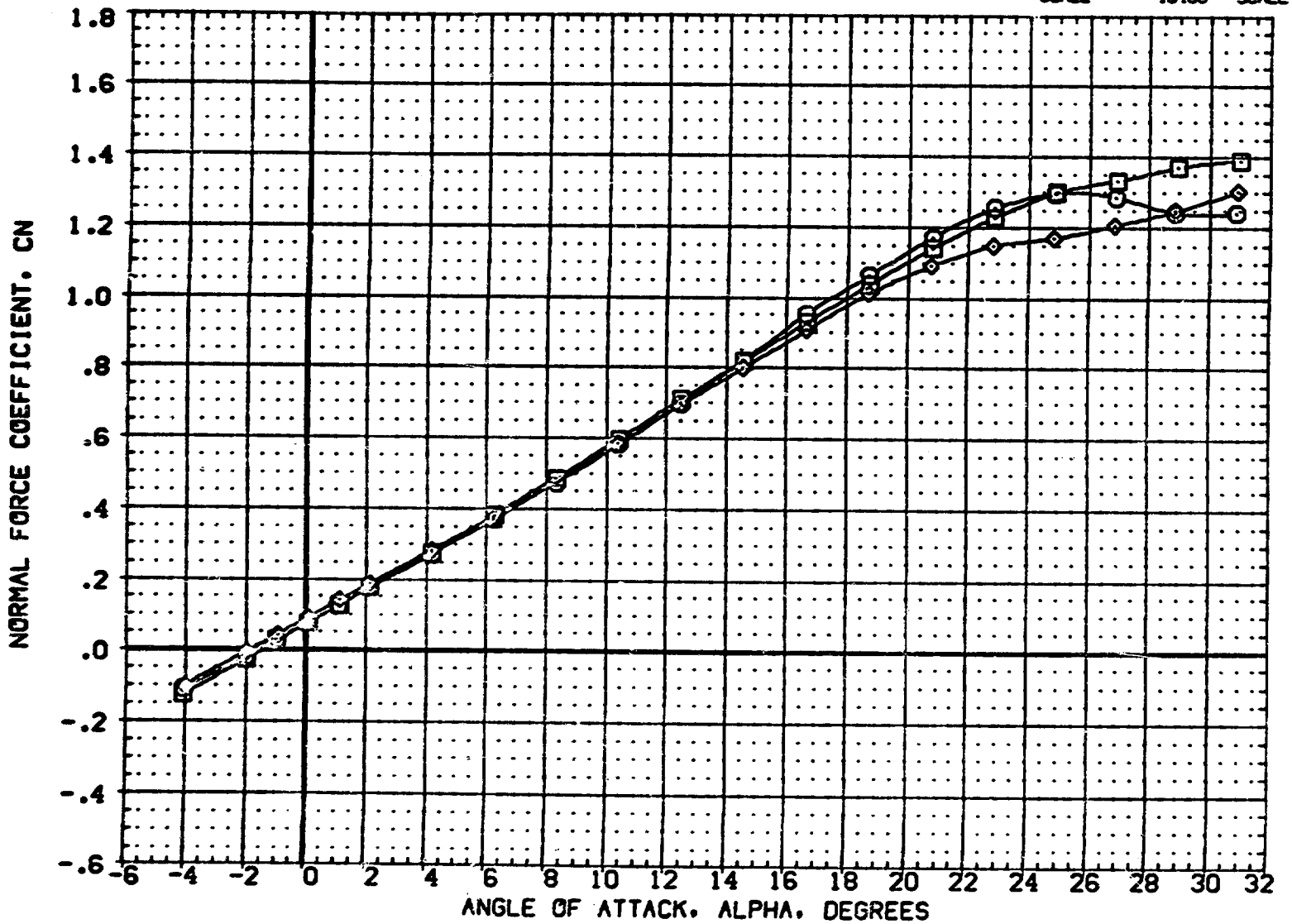


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(ADU001)	□	OA71C B16CSD7 F1W87 E18V3R3X9
(ADU067)	□	OA71C B16CSD7J35F1W87 E18V3R3X10
(ADU058)	◇	OA71C B16CSD7J35F1W87 E18V3R3X10

ELEVON	NACWL	NACLIP	NACBTA
.000			
.000	.000	7.000	5.000
.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2289	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

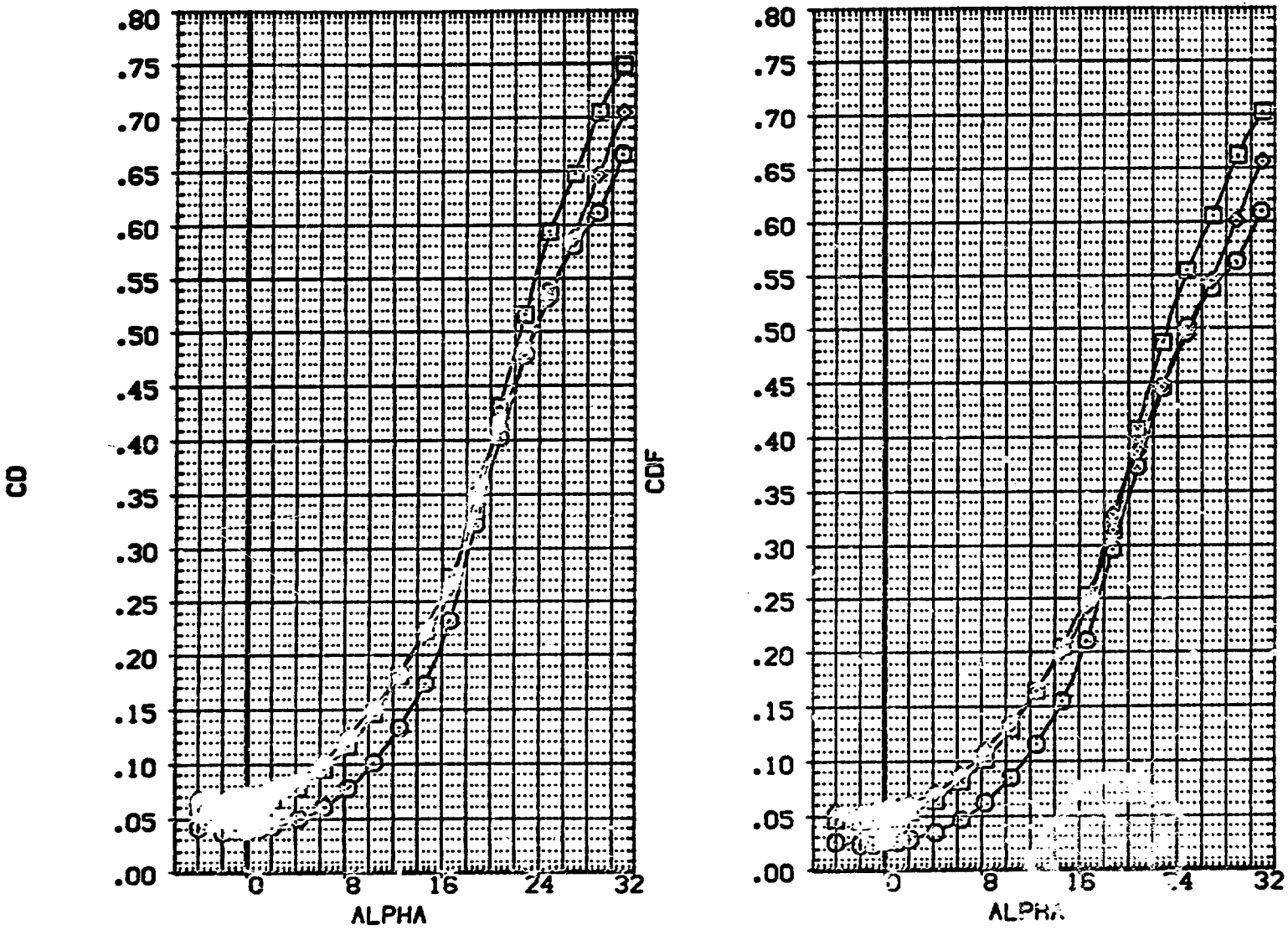


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(ADU001)	○	0A71C B16CS07 F1V87 E18V3R3X9
(ADU057)	□	0A71C B16CS07J3SF1V87 E18V3R3X10
(ADU058)	◇	0A71C B16CS07J3SF1V87 E18V3R3X10

ELEVON	NACXL	NACLIP	NACBTA
.000			
.000	.000	7.000	0.000
.000	.530	7.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.04CS	SCALE

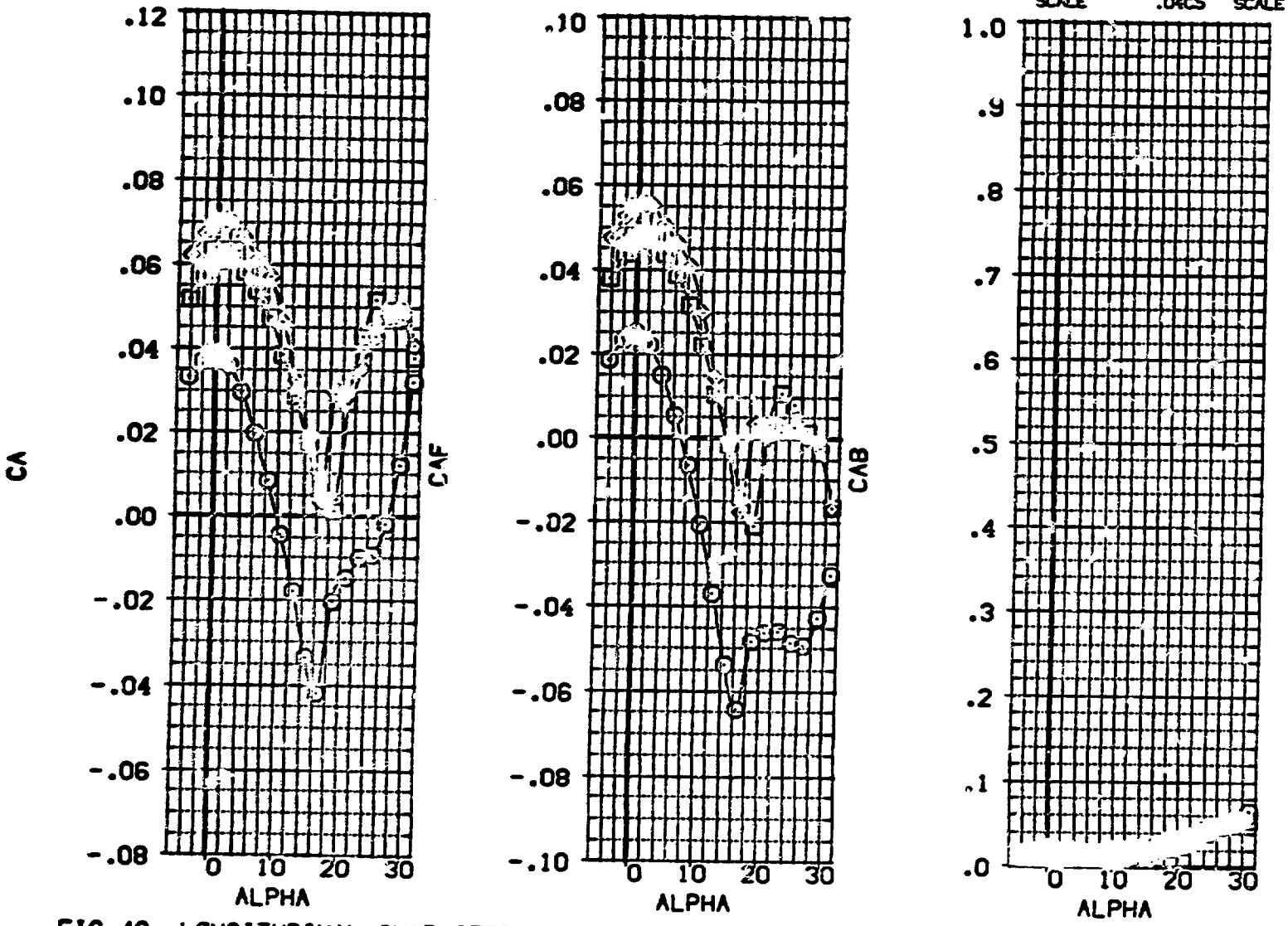


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACYL	NACLIP	NACBTA
(ADU001)	○	0A71C B16CSD7 F1V87 E18V3R3X9	.000			
(ADU067)	□	0A71C B16CSD7J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU058)	◇	0A71C B16CSD7J35F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION

SREF	4.4122	SQ.FT.
LREF	19.2298	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

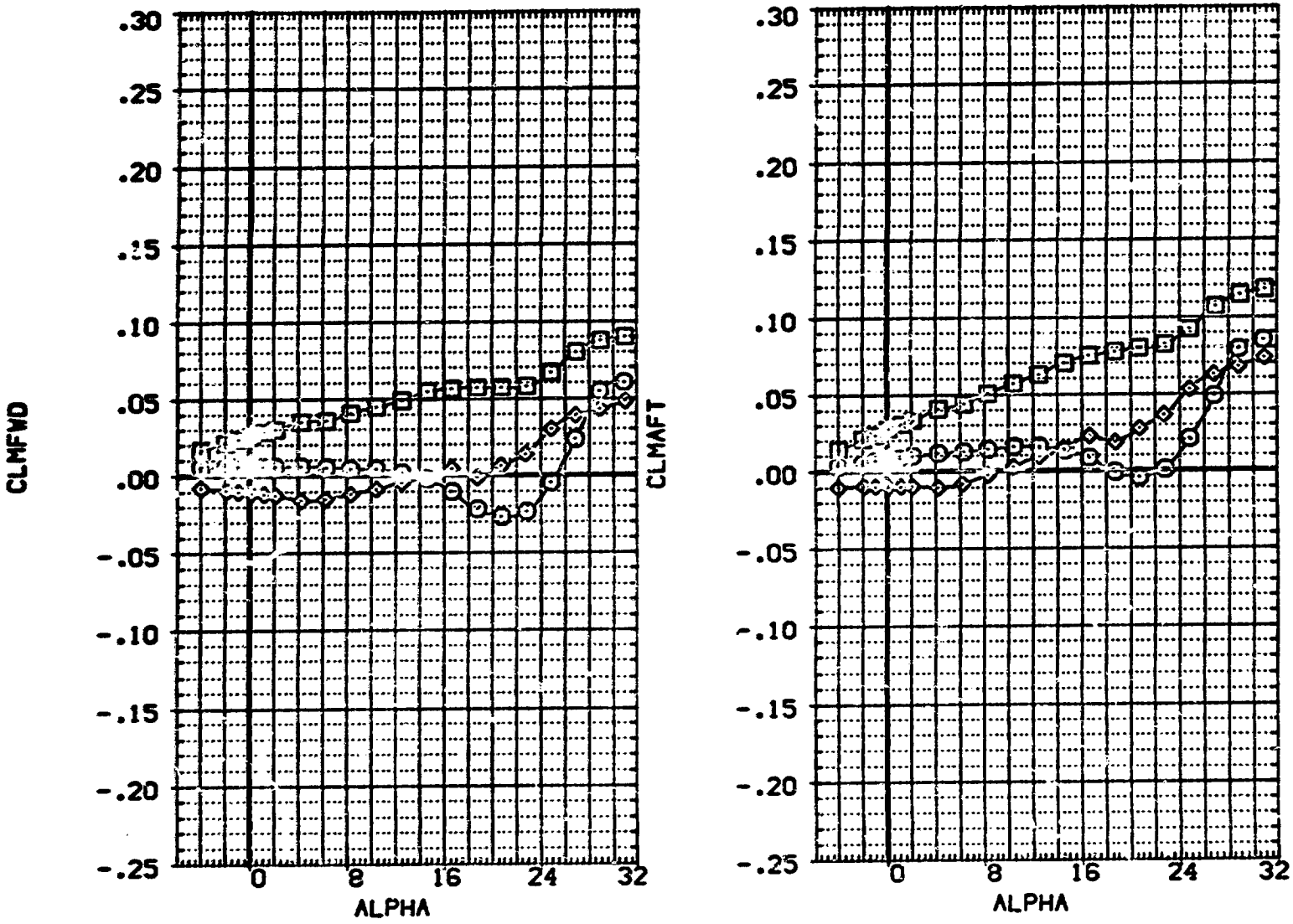


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	○	0A71C B16CS07 F1V87 E18V3R3X9	.000			
(ADU067)	□	0A71C B16CS07J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU058)	◇	0A71C B16CS07J35F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

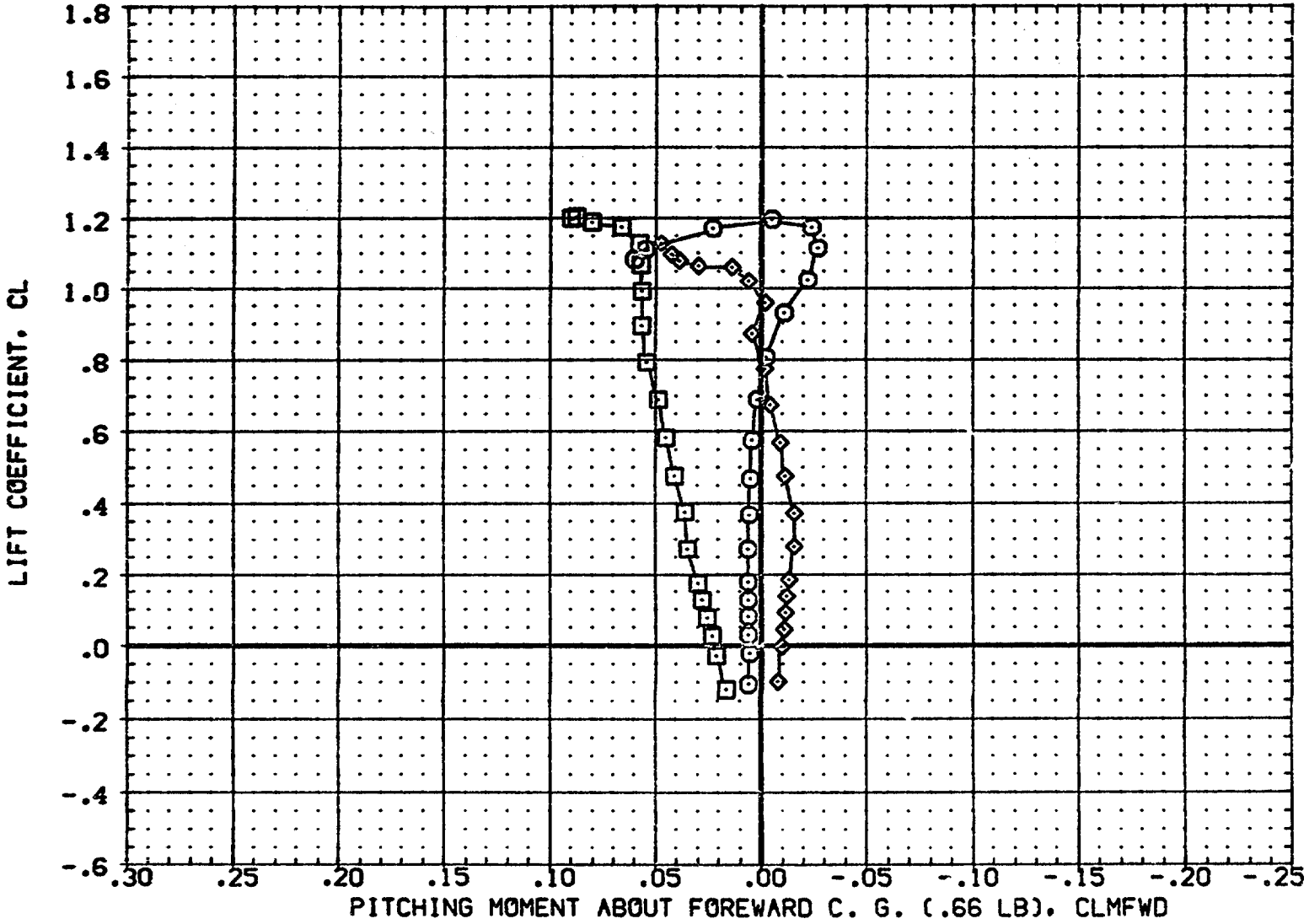


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLTP	NACBTA
(ADU001)	○	0A71C B16C507 F1V87 E18V3R3X9	.000			
(ADU067)	□	0A71C B16C507J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU058)	◇	0A71C B16C507J35F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2298	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

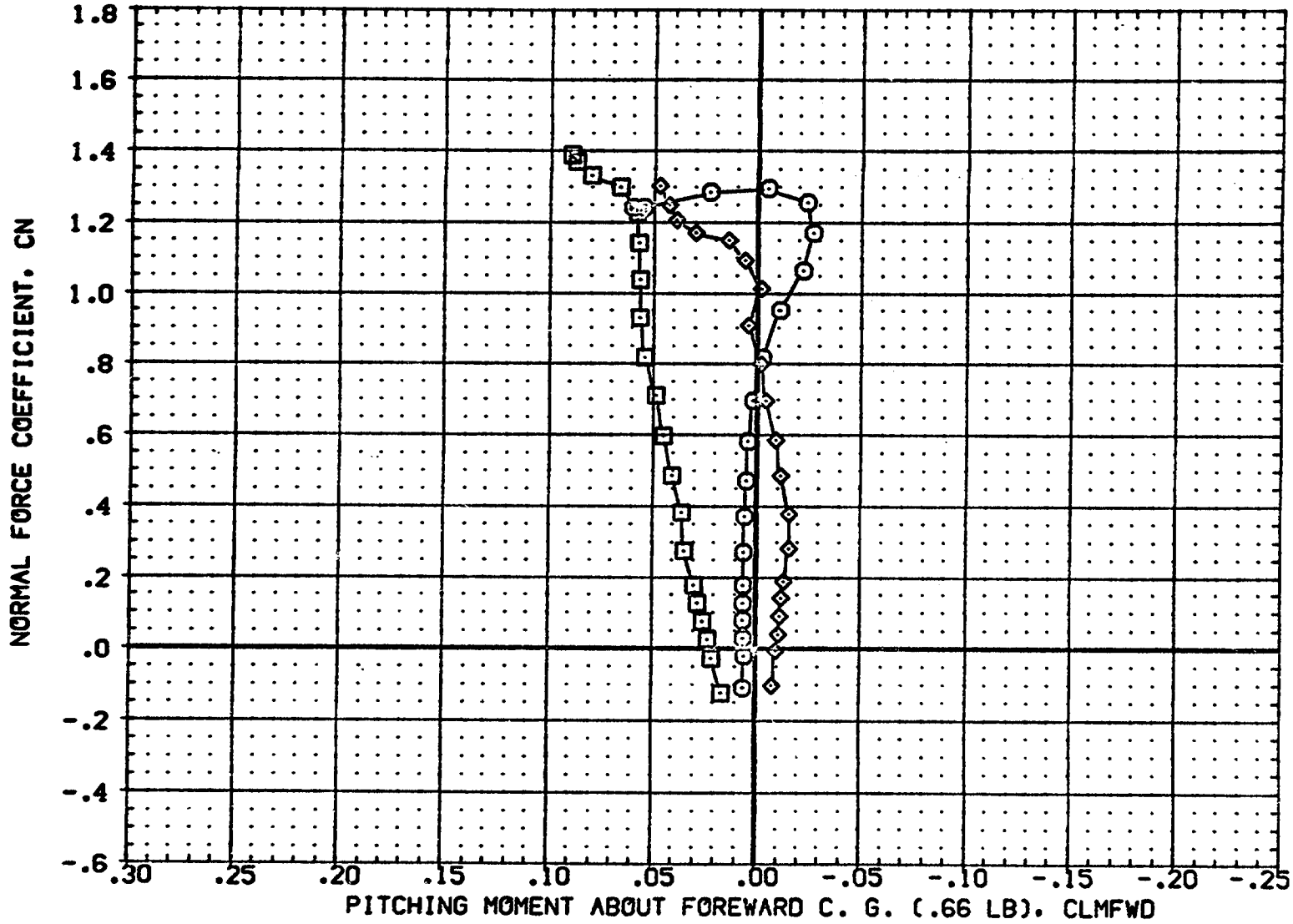


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NACX/L	NACLIP	NACBTA
(ADU001)	○	0A71C B16C507 F1V87 E18V3R3X9	.000			
(ADU067)	□	0A71C B16C507J35F1V87 E18V3R3X10	.000	.000	7.000	5.000
(ADU058)	◇	0A71C B16C507J35F1V87 E18V3R3X10	.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

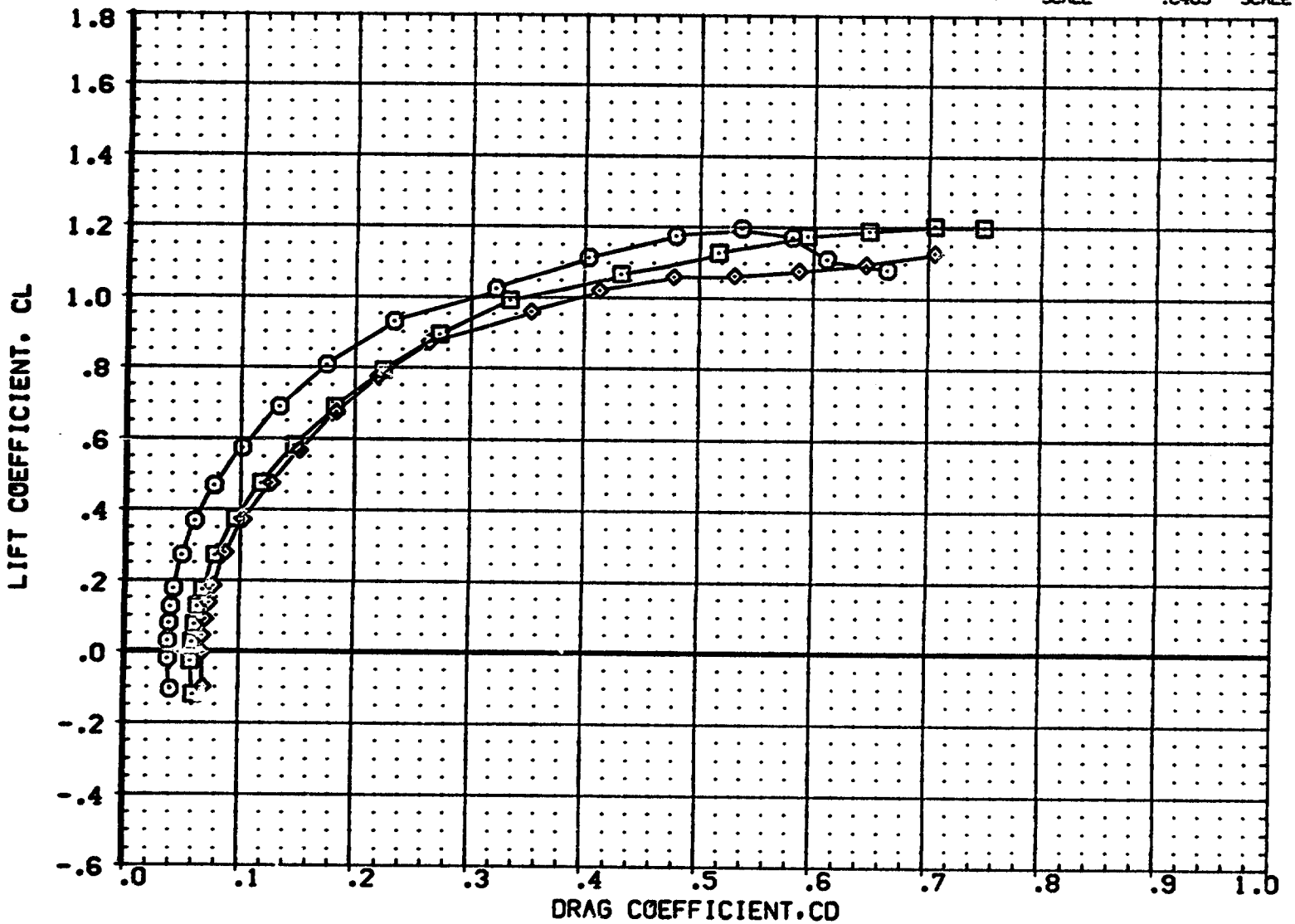


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

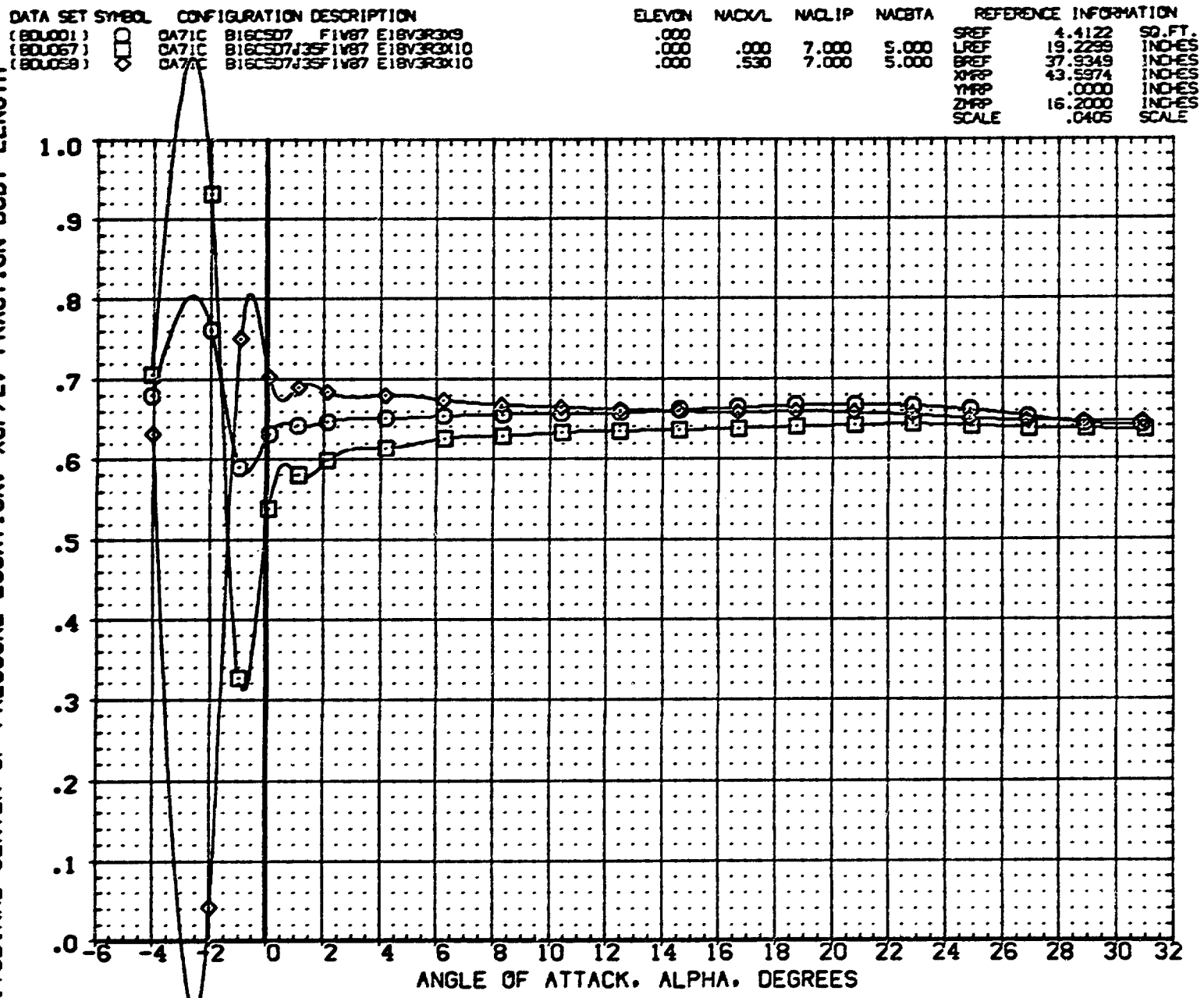


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(BDU001)	CA71C B16CSD7 F1V87 E18V3R3X9
(BDU067)	CA71C B16CSD7J35F1V87 E18V3R3X10
(BDU058)	CA71C B16CSD7J35F1V87 E18V3R3X10

ELEVON	NACX/L	NACLIP	NACBTA
.000			
.000	.000	7.000	5.000
.000	.530	7.000	5.000

REFERENCE INFORMATION		
SREF	4.4122	SQ.FT.
LREF	19.2299	INCHES
BREF	37.9349	INCHES
XMRP	43.5974	INCHES
YMRP	.0000	INCHES
ZMRP	16.2000	INCHES
SCALE	.0405	SCALE

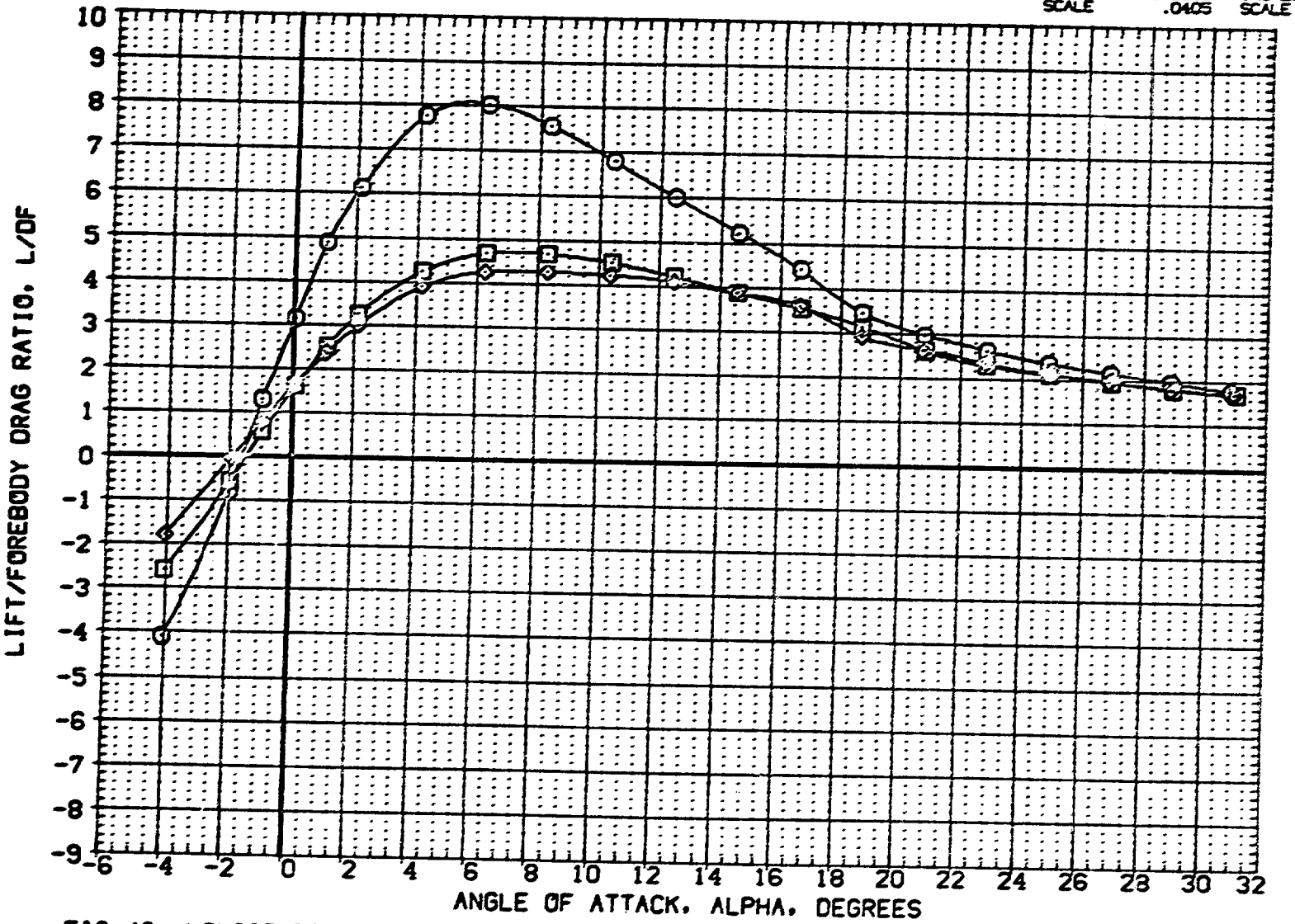


FIG 43 LONGITUDINAL CHARACTERISTICS - EFFECTS OF OVERWING CLUSTERS

(A)MACH = .20

APPENDIX

TABULATED SOURCE DATA

Plotted data listings are available on request from Data Management Systems.

OA71C B16C5D7 F1W87 E18V3R3X9 (RDU001) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0455 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000		

RUN NO. 1/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.070	-.10780	.02620	.00610	-.10940	.01848	.00030	-.00180	-.00100	.68000	.01464
.201	-2.010	-.01900	.02390	.00560	-.01980	.02327	.00040	-.00170	-.00100	.76200	.01382
.201	-.970	.03080	.02380	.00590	.03040	.02438	.00040	-.00180	.00000	.59000	.01451
.201	.060	.07940	.02530	.00600	.07940	.02526	.00020	-.00150	.00000	.63200	.01366
.201	1.060	.12500	.02560	.00610	.12550	.02336	.00000	-.00170	.00000	.64200	.01439
.201	2.110	.17510	.02860	.00630	.17610	.02212	.00000	-.00150	.00000	.64700	.01374
.201	4.170	.26870	.03460	.00610	.27050	.01500	-.00010	-.00160	.00000	.65100	.01460
.201	6.250	.36820	.04580	.00550	.37100	.00544	-.00010	-.00140	.00000	.65400	.01420
.201	8.320	.46840	.06180	.00470	.47240	-.00663	.00040	-.00110	.00000	.65600	.01501
.201	10.400	.57610	.08470	.00430	.58200	-.02069	.00070	-.00110	.00000	.65700	.01619
.201	12.480	.69000	.11490	.00200	.69850	-.03696	.00100	-.00140	-.00100	.65800	.01886
.201	14.590	.80700	.15450	-.00250	.81990	-.05379	.00370	-.00190	-.00700	.66100	.02032
.201	16.640	.93000	.21090	-.01070	.95150	-.06425	.00860	-.00100	-.01600	.66400	.02244
.201	18.730	1.02350	.29600	-.02200	1.06430	-.04834	.00150	-.00860	-.00100	.66700	.02803
.201	20.800	1.11180	.37290	-.02680	1.17180	-.04639	.00170	-.01390	.00100	.66800	.03165
.201	22.870	1.17400	.44520	-.02390	1.25480	-.04608	.00220	-.01750	.00400	.66600	.03623
.201	24.890	1.19600	.50120	-.00490	1.29580	-.04884	.00480	-.01980	.00400	.66100	.03962
.201	26.900	1.16940	.53800	.02320	1.28630	-.04947	.00480	-.00840	-.00300	.65300	.04764
.201	28.890	1.10890	.56310	.05470	1.24300	-.04284	.00160	-.00290	-.00300	.64400	.05506
.201	30.880	1.08230	.60930	.06000	1.24160	-.03256	-.00030	.00810	-.02300	.64200	.06480
	GRADIENT	.04600	.00104	.00004	.04641	-.00040	-.00006	.00003	.00014	-.00682	-.00001

OA71C B16C5D7 F1W87 E18V3R3X9 (RDU002) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0455 SCALE				

PARAMETRIC DATA

ALPHA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000		

RUN NO. 2/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.070	.09540	.01440	-.00640	.09540	.01433	-.00800	.00420	.18600	.68400	.01876
.201	-5.040	.08430	.02140	.00020	.08440	.02135	-.00490	.00270	.09500	.65800	.01573
.201	.000	.07850	.02500	.00590	.07850	.02495	.00000	-.00160	.00300	.63200	.01431
.201	5.030	.08070	.02070	.00100	.08070	.02068	.00600	-.00580	-.09300	.65500	.01606
.201	10.090	.08820	.01300	-.00510	.08820	.01296	.00950	-.00710	-.18900	.68000	.01915
	GRADIENT	-.00036	-.00007	.00008	-.00037	-.00007	.00108	-.00084	-.01867	-.00030	.00003

OA71C B16C5D7 F1W87 E18V3R3X9 (RDU003) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES
SCALE =	.0405 SCALE		

PARAMETRIC DATA

ALPHA =	10.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000		

RUN NO. 3/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.100	.58690	.07850	-.00900	.59140	-.02869	-.00910	.01630	.19900	.66500	.02021
.201	-5.070	.57930	.08190	.00020	.58460	-.02407	-.00500	.00950	.09700	.65900	.01727
.201	-.020	.57560	.08570	.00420	.58180	-.01959	.00080	-.00090	.00100	.65700	.01577
.201	5.010	.57690	.08180	.00090	.58220	-.02366	.00590	-.01190	-.09300	.65900	.01700
.201	10.060	.58120	.07720	-.00610	.58560	-.02898	.01060	-.01950	-.20000	.66300	.02026
	GRADIENT	-.00024	-.00001	.00007	-.00024	.00004	.00108	-.00212	-.01885	-.00000	-.00003

OA71C B16C5D7 F1W87 E18V3R3X9 (RDU004) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES
SCALE =	.0405 SCALE		

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	5.000	AILRON =	.000
RUDDER =	.000		

RUN NO. 4/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.010	.00260	.02600	-.04440	.00080	.02620	.00040	-.00130	.00000	19.27600	.01630
.201	-1.960	.09380	.02610	-.04530	.09280	.02935	.00050	-.00120	.00000	.83400	.01690
.201	-.900	.14250	.02770	-.04570	.14200	.03005	.00020	-.00110	.00100	.77500	.01685
.201	.120	.18910	.02930	-.04680	.18910	.02898	.00010	-.00120	.00100	.74800	.01778
.201	1.150	.23470	.03350	-.04610	.23540	.02881	.00020	-.00100	.00000	.73000	.01625
.201	2.180	.28340	.03780	-.04660	.28460	.02700	.00010	-.00130	.00100	.71800	.01615
.201	4.230	.37890	.04690	-.04700	.38130	.01881	.00020	-.00150	.00000	.70400	.01760
.201	6.290	.47540	.06110	-.04690	.47920	.00864	.00020	-.00140	.00000	.69500	.01701
.201	8.370	.57570	.08060	-.04610	.58130	-.00412	.00050	-.00100	.00100	.68800	.01788
.201	10.470	.68850	.10680	-.04820	.69690	-.01815	.00080	-.00110	.00000	.68400	.01844
.201	12.590	.80050	.14310	-.05060	.81250	-.03438	.00150	-.00090	.00000	.68200	.02080
.201	14.640	.91840	.18770	-.05630	.93600	-.05062	.00490	-.00150	-.00800	.68100	.02218
.201	16.700	1.04490	.25270	-.06660	1.07350	-.05833	.01010	.00100	-.01800	.68200	.02479
.201	18.790	1.12210	.34225	-.07400	1.17250	-.03751	.00360	-.00900	-.00100	.68200	.03043
.201	20.870	1.21000	.41980	-.07770	1.28020	-.03887	.00290	-.01460	.00200	.68100	.03503
.201	22.930	1.25760	.49160	-.07030	1.34980	-.03737	.00270	-.02060	.00900	.67800	.03975
.201	24.930	1.25450	.54040	-.04270	1.36490	-.03872	.00560	-.02580	.00900	.67100	.04319
.201	26.920	1.19240	.56240	-.00230	1.31780	-.03843	.00550	-.00400	-.00700	.66000	.05129
.201	28.920	1.13520	.58860	.02790	1.27830	-.03374	.00370	-.00030	-.00700	.65200	.06008
.201	30.930	1.12320	.64520	.03050	1.29510	-.02399	.00010	.00900	-.01900	.65100	.06830
	GRADIENT	.04566	.00260	-.00031	.04618	-.00082	-.00004	-.00002	.00002	-1.72363	.00007

OA71C B16C5D7 F1W87 E18V3R3X9 (RDU005) (29 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.5974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0405 SCALE

PARAMETRIC DATA

BETA = .000 BOFLAP = -10.000
ELEVON = .000 AILRON = 5.000
RUDDER = .000

RUN NO. 5/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.080	-.10870	.02890	.00670	-.11050	.02109	.00410	.01910	-.01900	.68100	.01438
.201	-2.000	-.01330	.02600	.00660	-.01420	.02554	.00440	.01970	-.02100	.82700	.01489
.201	-.960	.03230	.02610	.00630	.03190	.02669	.00450	.02000	-.02200	.58900	.01455
.201	.060	.08000	.02630	.00630	.08000	.02625	.00460	.02040	-.02200	.63100	.01519
.201	1.070	.12600	.02840	.00650	.12650	.02604	.00470	.02040	-.02200	.64100	.01453
.201	2.110	.17390	.03000	.00650	.17490	.02358	.00470	.02080	-.02400	.64600	.01553
.201	4.150	.26750	.03720	.00690	.26950	.01779	.00490	.02090	-.02400	.65000	.01498
.201	6.240	.36590	.04770	.00700	.36890	.00760	.00530	.02130	-.02600	.65300	.01515
.201	8.330	.46630	.06480	.00710	.47080	-.00340	.00580	.02200	-.02800	.65400	.01534
.201	10.390	.57070	.08690	.00660	.57700	-.01739	.00640	.02220	-.03100	.65500	.01578
.201	12.490	.68510	.11760	.00480	.69430	-.03329	.00720	.02290	-.03400	.65700	.01798
.201	14.550	.80140	.15540	.00120	.81480	-.05096	.01060	.02310	-.04200	.65900	.02039
.201	16.640	.92200	.21400	-.00850	.94470	-.05905	.01540	.02500	-.05100	.66300	.02281
.201	18.730	1.01450	.29720	-.01850	1.05620	-.04430	.00770	.01480	-.03400	.66600	.02802
.201	20.790	1.10290	.37220	-.02250	1.16320	-.04365	.00640	.00710	-.02700	.66600	.03269
.201	22.860	1.16820	.44660	-.02110	1.24990	-.04242	.00590	.00050	-.01600	.66600	.03689
.201	24.910	1.18650	.50080	-.00190	1.28700	-.04561	.00720	-.00430	-.00900	.66900	.04124
.201	26.910	1.16660	.54050	.02310	1.28490	-.04597	.00580	-.00190	.00100	.65300	.04948
.201	28.880	1.10190	.56510	.05380	1.23770	-.03754	.00230	.00520	.00000	.64400	.05763
.201	30.880	1.07940	.61140	.06130	1.24020	-.02937	-.00080	.01780	-.01900	.64200	.06184
	GRADIENT	.04570	.00100	.00002	.04616	-.00041	.00009	.00023	-.00060	-.01007	.00009

OA71C S16C5D7 F1W87 S18V3R3X9 (RDU006) (20 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 45.5974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0405 SCALE

PARAMETRIC DATA

BETA = .000 BDFLAP = -18.000
ELEVON = -15.000 AILRON = .000
RUDDER = .000

RUN NO. 6/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.190	-.31520	.04120	.10140	-.31740	.01807	.00040	-.00130	-.00200	.77400	.00897
.201	-2.130	-.22520	.03230	.10130	-.22620	.02389	.00040	-.00120	-.00200	.82000	.00901
.201	-1.090	-.17530	.02930	.10190	-.17580	.02603	.00030	-.00100	-.00200	.86700	.00935
.201	-.050	-.12790	.02720	.10210	-.12790	.02713	.00000	-.00070	-.00200	.94500	.00896
.201	.980	-.08230	.02500	.10260	-.08190	.02646	.00030	-.00110	-.00200	1.10700	.00978
.201	2.000	-.03630	.02490	.10280	-.03540	.02584	.00020	-.00080	-.00200	1.69600	.00931
.201	4.040	.05720	.02450	.10450	.05880	.02039	.00020	-.00070	-.00200	.02500	.00992
.201	6.120	.15360	.02840	.10570	.15580	.01187	.00070	-.00090	-.00200	.41700	.01038
.201	8.160	.24970	.03740	.10730	.25250	.00151	.00070	-.00070	-.00200	.50800	.01011
.201	10.270	.35330	.05220	.10880	.35700	-.01162	.00090	-.00060	-.00200	.55000	.01186
.201	12.330	.46150	.07540	.10780	.46700	-.02493	.00110	-.00080	-.00100	.57700	.01321
.201	14.440	.57750	.10610	.10560	.58570	-.04125	.00340	-.00070	-.00600	.59500	.01563
.201	16.510	.69070	.15030	.10090	.70490	-.05230	.00820	-.00040	-.01400	.60800	.01737
.201	18.610	.80280	.22470	.08600	.83250	-.04321	.00340	-.00540	-.00300	.62300	.02116
.201	20.680	.89750	.29100	.07910	.94230	-.04465	.00330	-.01030	-.00100	.62900	.02361
.201	22.760	.98700	.36400	.07540	1.05100	-.04629	.00340	-.01550	.00500	.63500	.02822
.201	24.820	1.04150	.42650	.07990	1.12430	-.05025	.00590	-.01730	.00500	.63400	.03104
.201	26.880	1.05960	.47840	.09280	1.16150	-.05203	.00620	-.01420	.00600	.63100	.03843
.201	28.840	1.01900	.50970	.11660	1.13850	-.04525	.00250	-.00370	.00200	.62300	.04665
.201	30.850	.99080	.55090	.12320	1.13310	-.03513	.00030	.00970	-.02100	.62100	.05430
	GRADIENT	.04533	-.00201	.00037	.04579	.00032	-.00003	.00007	.00000	-.02270	.00011

OA71C B16C5D7 F1W87 E19V3R3X9 (RDU007) (20 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.5974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0405 SCALE

PARAMETRIC DATA

BETA = .000 BDFLAP = -18.000
ELEVON = .000 AILRON = 10.000
RUDDER = .000

RUN NO. 7/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CY.I	CBL	CY	XCP/L	CAB
.201	-4.080	-.10130	.03480	.00210	-.10350	.02750	.00680	.03790	-.03700	.66700	.01577
.201	-2.030	-.00980	.03260	.00170	-.01070	.03229	.00760	.03840	-.04000	.71900	.01591
.201	-.990	.03860	.03260	.00190	.03800	.03325	.00790	.03900	-.04200	.64100	.01598
.201	.040	.08450	.03350	.00250	.08450	.03346	.00820	.03970	-.04500	.64900	.01577
.201	1.090	.13200	.03470	.00280	.13260	.03221	.00850	.04020	-.04500	.65200	.01628
.201	2.120	.17830	.03770	.00320	.17960	.03114	.00880	.04020	-.04600	.65300	.01573
.201	4.170	.26980	.04460	.00400	.27230	.02483	.00930	.04150	-.04900	.65400	.01567
.201	6.250	.36370	.05450	.00580	.36750	.01462	.00960	.04110	-.05000	.65400	.01616
.201	8.370	.46380	.07090	.00640	.46910	.00261	.01050	.04200	-.05400	.65500	.01611
.201	10.390	.57280	.09440	.00530	.58040	-.01048	.01160	.04350	-.05900	.65600	.01724
.201	12.470	.68540	.12550	.00220	.69640	-.02554	.01260	.04430	-.06200	.65800	.01844
.201	14.550	.79640	.16420	.00060	.81210	-.04121	.01580	.04520	-.07200	.65900	.01930
.201	16.680	.91630	.22010	-.00620	.94090	-.05190	.01970	.04680	-.08000	.66200	.02266
.201	18.740	1.00170	.30240	-.01310	1.04480	-.03507	.01060	.03390	-.05900	.66400	.02622
.201	20.800	1.08240	.37490	-.01550	1.14500	-.03395	.00920	.02520	-.05300	.66400	.03065
.201	22.860	1.13360	.44440	-.01150	1.21720	-.03089	.00740	.01530	-.03600	.66300	.03443
.201	24.900	1.15910	.49900	.00590	1.26140	-.03548	.00810	.00810	-.02300	.65800	.04039
.201	26.910	1.14860	.54010	.03000	1.26870	-.03819	.00660	.00610	-.00500	.65100	.05131
.201	28.890	1.09180	.56810	.05500	1.23040	-.03020	.00060	.01400	.00100	.64400	.05996
.201	30.890	1.06920	.61590	.06410	1.23380	-.02048	-.00240	.02490	-.01490	.64100	.06233
	GRADIENT	.04508	.00119	.00027	.04565	-.00032	.00030	.00040	-.00145	-.00403	-.00001

OA71C B16C5D7 F1W87 E18V3R3X9 (RDU008) (20 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.9974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0405 SCALE

PARAMETRIC DATA

BETA = .000 SDFLAP = -10.000
ELEVON = 10.000 AILRON = .000
RUDDER = .000

RUN NO. 8/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLN	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-3.970	.10150	.02900	-.09480	.09920	.03805	.00090	-.00170	.00000	1.00100	.02013
.201	-1.900	.19340	.03310	-.09550	.19220	.03958	.00080	-.00160	.00000	.83700	.01992
.201	-.880	.24250	.03640	-.09540	.24190	.04008	.00070	-.00170	.00000	.80000	.01966
.201	.160	.28860	.04000	-.09570	.28870	.03920	.00060	-.00170	.00000	.77800	.01989
.201	1.180	.33400	.04580	-.09580	.33490	.03996	.00060	-.00170	.00100	.76200	.01861
.201	2.230	.38250	.05090	-.09540	.38400	.03537	.00060	-.00170	.00000	.74800	.01957
.201	4.280	.47460	.06360	-.09580	.47600	.02768	.00050	-.00190	.00200	.73000	.01881
.201	6.360	.57150	.08100	-.09580	.57690	.01722	.00060	-.00190	.00100	.71800	.01883
.201	8.440	.67320	.10520	-.09580	.68130	.00524	.00120	-.00150	.00000	.70900	.01895
.201	10.540	.79210	.13740	-.09680	.80390	-.0097	.00120	-.00150	.00000	.70300	.02046
.201	12.630	.90400	.17620	-.10150	.92060	-.02574	.00200	-.00060	-.00300	.69900	.02255
.201	14.690	1.02420	.22560	-.10730	1.04800	-.04154	.00670	-.00120	-.01100	.69600	.02489
.201	16.790	1.14290	.29620	-.11760	1.17980	-.04668	.01080	.00180	-.01900	.69500	.02742
.201	18.840	1.20900	.38370	-.11750	1.26430	-.02600	.00350	-.01030	-.00100	.69300	.03433
.201	20.910	1.27710	.46490	-.12000	1.35900	-.02147	.00360	-.01680	.00300	.69100	.03772
.201	22.950	1.30140	.52910	-.10240	1.40470	-.02024	.00290	-.02170	.01100	.68600	.04236
.201	24.960	1.29270	.57330	-.06760	1.41390	-.02582	.00620	-.01790	.00400	.67700	.04726
.201	26.910	1.16570	.56690	-.01050	1.29600	-.02228	.00990	.01480	-.05100	.66200	.05007
.201	28.900	1.13530	.60870	.00670	1.28610	-.01591	.00320	.01130	-.03000	.65800	.05826
.201	30.930	1.15160	.67570	.00670	1.33510	-.01233	-.00030	.00920	-.01900	.65850	.07075
	GRADIENT	.04526	.00420	.00009	.04596	-.00097	-.00005	-.00002	.00021	-.03001	-.00016

DATE 05 DEC 73 TABULATED SOURCE DATA - OA71C (RDU009) (20 OCT 73)

OA71C B16C9D7 F1W87 E18V3R3X9

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	-20.000	AILRON =	.000
RUDDER =	.000		

RUN NO. 9/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLN	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.280	-.45640	.08970	.16210	-.46030	.03547	.00140	-.00850	-.00400	.78500	.00739
.201	-2.200	-.36470	.05510	.16180	-.36650	.04111	.00100	-.00800	-.00300	.81700	.00901
.201	-1.160	-.32580	.09070	.16630	-.32680	.04410	.00130	-.00680	-.00400	.84100	.00745
.201	-.190	-.27900	.04580	.16500	-.27910	.04513	.00110	-.00670	-.00300	.87100	.00760
.201	.890	-.22780	.04190	.16430	-.22710	.04548	.00090	-.00610	-.00300	.91800	.00848
.201	1.910	-.18120	.03910	.16430	-.17980	.04515	.00090	-.00600	-.00200	.98700	.00840
.201	3.980	-.08770	.03460	.16490	-.08510	.04066	.00080	-.00580	-.00100	1.35200	.00876
.201	6.050	.00560	.03260	.16690	.00900	.03190	.00080	-.00540	-.00200	-5.93500	.01021
.201	8.120	.09930	.03660	.17040	.10350	.02228	.00080	-.00540	.00000	.07100	.01135
.201	10.190	.19180	.04670	.17550	.19710	.01208	.00110	-.00540	.00000	.34100	.01073
.201	12.320	.29600	.06530	.17800	.30310	.00065	.00160	-.00530	-.00100	.45000	.01109
.201	14.390	.39870	.08960	.17970	.40850	-.01198	.00310	-.00610	.00000	.50200	.01245
.201	16.410	.50250	.12450	.18130	.51720	-.02255	.00680	-.00480	-.00600	.53400	.01329
.201	18.500	.59970	.17360	.18240	.62380	-.02567	.00510	-.00180	-.00500	.55500	.01522
.201	20.580	.69290	.23180	.17925	.73020	-.02631	.00495	-.00530	-.00400	.57200	.01698
.201	22.630	.77440	.29740	.17240	.82920	-.02358	.00500	-.01010	.00000	.58500	.02108
.201	24.720	.85440	.36190	.17000	.92740	-.02857	.00600	-.01310	.00450	.59400	.02511
.201	26.800	.90040	.42080	.17510	.99340	-.03049	.00790	-.01400	.00550	.59600	.02948
.201	28.760	.87370	.45200	.19060	.98340	-.02427	.00390	.00410	-.01000	.59300	.03967
.201	30.790	.88600	.50310	.19000	1.01860	-.02146	.00070	.00710	-.01100	.59300	.04607
	GRADIENT	.04479	-.00419	.00034	.04557	.00070	-.00007	.00036	.00035	.06197	.00012

OA71C B16C507 F1W87 E18V3R3X9 (RDU010) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
DREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BOFLAP =	-18.000
ELEVON =	.000	AILRON =	15.000
RUDDER =	.000		

RUN NO. 10/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLN	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.070	-.08110	.04600	-.00800	-.08420	.04020	.01020	.05540	-.05500	.62900	.01677
.201	-1.970	.00910	.04460	-.00790	.00790	.04495	.01100	.05630	-.05900	1.03400	.01677
.201	-.950	.05690	.04530	-.00760	.05610	.04625	.01120	.05630	-.06000	.70800	.01668
.201	.050	.10100	.04640	-.00690	.10100	.04631	.01160	.05680	-.06200	.68400	.01658
.201	1.090	.14700	.04810	-.00570	.14790	.04531	.01190	.05720	-.06300	.67300	.01692
.201	2.120	.19170	.05060	-.00450	.19340	.04374	.01230	.05750	-.06500	.66800	.01654
.201	4.170	.27830	.05760	-.00100	.28180	.03726	.01300	.05740	-.06700	.66100	.01660
.201	6.200	.37310	.06930	.00040	.37840	.02818	.01370	.05850	-.07200	.65900	.01637
.201	8.320	.47020	.08550	.00100	.47770	.01653	.01460	.05960	-.07700	.65900	.01718
.201	10.400	.58250	.11090	-.00160	.59300	.00586	.01620	.06350	-.08400	.66100	.01864
.201	12.510	.68890	.14290	-.00290	.70360	-.00977	.01810	.06540	-.09100	.66100	.01904
.201	14.590	.79810	.18320	-.00230	.81690	-.02378	.02160	.06720	-.10100	.66100	.02042
.201	16.640	.91330	.24010	-.00790	.94580	-.03163	.02490	.07010	-.10700	.66300	.02316
.201	18.710	.98680	.31510	-.00890	1.03560	-.01822	.01470	.05380	-.08300	.66300	.02677
.201	20.780	1.06590	.38650	-.01080	1.13370	-.01682	.01220	.04460	-.07500	.66300	.03130
.201	22.840	1.11190	.45270	-.00320	1.20040	-.01435	.00760	.02700	-.04500	.66000	.03531
.201	24.880	1.13650	.50370	.01480	1.24290	-.02125	.00750	.01640	-.02400	.65500	.04225
.201	26.880	1.10660	.53480	.04410	1.22890	-.02344	.00710	.02120	-.01900	.64700	.05226
.201	28.850	1.04280	.55890	.06670	1.18310	-.01371	-.00110	.03460	-.01700	.63900	.06234
.201	30.870	1.06220	.62270	.06620	1.23120	-.01062	-.00420	.03040	-.00300	.64000	.06516
	GRADIENT	.04384	.00142	.00085	.04464	-.00035	.00034	.00026	-.00146	-.01421	-.00002

OA71C B16C507 F1W87 E18V3R3X9 (RDU011) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
DREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

ALPHA =	.000	BOFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000		

RUN NO. 11/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLN	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.100	.09570	.01420	-.00330	.09570	.01420	-.00810	.00410	.18600	.67900	.01640
.201	-5.070	.08320	.02080	.00140	.08320	.02079	-.00310	.00260	.09500	.65300	.01617
.201	-.020	.07750	.02490	.00660	.07750	.02491	.00020	-.00150	.00000	.62900	.01393
.201	5.000	.07790	.02020	.00160	.07790	.02024	.00580	-.00570	-.09400	.65200	.01619
.201	10.070	.08560	.01360	-.00480	.08560	.01358	.00940	-.00730	-.18800	.66000	.01640
	GRADIENT	-.00053	-.00006	.00002	-.00055	-.00005	.00150	-.00082	-.01877	-.00010	.00000

OA71C B16C5D7 F1W87 E18V3R3X9 (RDU012) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	-40.000	AILRON =	.000
RUDDER =	.000	SPDBRK =	.000

RUN NO. 12/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-3.300	-.53140	.11520	.20190	-.53720	.08440	.00010	-.00210	-.00200	.79400	.01652
.201	-2.260	-.48290	.10670	.19960	-.48670	.08758	.00000	-.00230	-.00200	.80600	.01579
.201	-1.250	-.43580	.09770	.19820	-.43790	.08815	.00010	-.00220	-.00300	.82100	.01701
.201	-.190	-.38500	.09130	.19620	-.38530	.09005	.00020	-.00220	-.00200	.84200	.01641
.201	.850	-.33310	.08440	.19400	-.33190	.08945	.00040	-.00210	-.00300	.86900	.01719
.201	1.900	-.28420	.07960	.19270	-.28140	.08904	.00030	-.00180	-.00200	.90400	.01696
.201	3.920	-.18480	.07140	.18940	-.17940	.08397	.00030	-.00160	-.00100	1.03700	.01805
.201	5.970	-.09610	.06800	.19100	-.08850	.07769	.00090	-.00110	-.00300	1.43100	.01907
.201	8.060	-.01210	.06710	.20020	-.00250	.06819	.00110	-.00120	-.00200	28.50500	.02042
.201	10.100	.09070	.07260	.20190	.10200	.05564	.00070	-.00260	-.00100	-.04700	.02083
.201	12.190	.18260	.08620	.20750	.19670	.04569	.00060	-.00340	.00000	.28200	.02132
.201	14.260	.27020	.10570	.21640	.28790	.03595	.00150	-.00160	.00000	.39100	.02122
.201	16.340	.36240	.13570	.22220	.38590	.02825	.00220	.00090	.00000	.45400	.02022
.201	18.400	.45850	.17270	.22560	.48960	.01917	.00310	.00030	-.00100	.49500	.02189
.201	20.440	.53250	.21970	.23350	.57570	.01985	.00210	.00090	-.00100	.51400	.02349
.201	22.550	.60770	.26920	.24090	.66450	.01551	.00180	-.00280	.00000	.53000	.02419
.201	24.600	.65480	.32400	.24400	.73030	.02198	.00360	-.00370	-.00200	.54000	.02445
.201	26.640	.70910	.38050	.24900	.80450	.02213	.00520	-.00600	.00000	.54900	.02886
.201	28.750	.75200	.43670	.25470	.86940	.02110	.00340	-.00760	.00300	.55500	.03418
.201	30.720	.78770	.49030	.25480	.92760	.01903	.00170	-.00750	.00200	.56100	.04054
	GRADIENT	.04740	-.00516	-.00131	.04885	-.00076	.00008	.00012	-.00000	.06012	.00029

OA71C B16C5D7 F1W87 E18V3R3X9 (RDU014) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	-30.000	AILRON =	.000
RUDDER =	.000	SPDBRK =	.000

RUN NO. 14/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.330	-.51950	.09600	.18500	-.52530	.05654	-.00020	.00310	.00000	.78500	.01150
.201	-2.260	-.41860	.08050	.18160	-.42140	.06398	.00010	.00350	.00000	.81400	.01149
.201	-1.130	-.36360	.07320	.17980	-.36500	.06608	.00020	.00410	-.00100	.83600	.01162
.201	-.180	-.31940	.06770	.17820	-.31960	.06670	.00030	.00390	.00000	.85900	.01208
.201	.870	-.27060	.06270	.17790	-.26960	.06688	.00060	.00480	-.00300	.89500	.01224
.201	1.930	-.21990	.05770	.17600	-.21780	.06514	.00060	.00450	-.00300	.94800	.01327
.201	3.940	-.12510	.05200	.17500	-.12120	.06049	.00080	.00480	-.00400	1.17500	.01404
.201	6.080	-.02740	.04950	.17580	-.02200	.05214	.00090	.00420	-.00400	3.51300	.01515
.201	8.080	.05850	.05170	.18090	.06520	.04298	.00120	.00310	-.00500	-.33100	.01495
.201	10.150	.14370	.05900	.18990	.15190	.03280	.00180	.00300	-.00300	.21200	.01489
.201	11.900	.22810	.07660	.19870	.23900	.02791	.00150	.00180	-.00300	.36200	.01348
.201	14.270	.31050	.09340	.20990	.32390	.01395	.00250	.00190	-.00200	.42800	.01376
.201	16.340	.38640	.11690	.22440	.40370	.00346	.00430	-.00050	-.00500	.46100	.01588
.201	18.420	.47330	.15310	.23290	.49740	-.00430	.00410	.00010	-.00500	.49200	.01727
.201	20.450	.54550	.20230	.23980	.58180	-.00107	.00270	-.00240	-.00400	.51200	.01745
.201	22.520	.61510	.25310	.24350	.66520	-.00184	.00210	-.00590	-.00280	.52900	.02168
.201	24.640	.68500	.31600	.23960	.75440	.00163	.00280	-.00820	.00100	.54600	.02432
.201	26.650	.76290	.38120	.23690	.85290	-.00155	.00350	-.01030	.00600	.56000	.02848
.201	28.740	.85050	.43760	.23980	.91230	-.00129	.00180	-.00720	.00800	.56600	.03375
.201	30.750	.81500	.48470	.24720	.94830	-.00031	.00210	-.00680	.00400	.56600	.04146
	GRADIENT	.04759	-.00535	-.00122	.04876	.00045	.00012	.00022	-.00055	.04326	.00033

OA71C B16C5D7J32F1W87 E18V3R3X10 (RDU032) (20 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.5974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0405 SCALE

PARAMETRIC DATA

BETA = .000 BDFLAP = -18.000
ELEVON = .000 AILRON = .000
RUDDER = .000 NACBTA = 5.000
NACX/L = .000 NACLIP = 7.000

RUN NO. 32/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.050	-.13100	.04290	-.00960	-.13370	.03360	.00110	-.00200	-.00600	.63400	.01411
.201	-2.040	-.05280	.03830	-.00570	-.03420	.03719	.00165	-.00160	-.00500	.60000	.01430
.201	-.990	.01760	.03750	-.00320	.01690	.03782	.00160	-.00170	-.00400	.72900	.01412
.201	.030	.06740	.03740	-.00110	.06740	.03738	.00150	-.00170	-.00300	.66600	.01434
.201	1.060	.11700	.03820	.00100	.11770	.03605	.00140	-.00170	-.00100	.65600	.01438
.201	2.120	.17010	.04090	.00370	.17150	.03454	.00130	-.00170	-.00100	.65200	.01420
.201	4.170	.26840	.04770	.00780	.27120	.02805	.00120	-.00180	.00000	.64900	.01437
.201	6.240	.37230	.05890	.01180	.37650	.01809	.00110	-.00210	.00000	.64800	.01495
.201	8.320	.47860	.07690	.01690	.48470	.00686	.00100	-.00200	.00000	.64700	.01546
.201	10.410	.58680	.10220	.02210	.59560	-.00554	.00100	-.00210	.00000	.64600	.01600
.201	12.500	.69850	.13530	.02710	.71120	-.01917	.00140	-.00210	.00100	.64600	.01686
.201	14.630	.80010	.17250	.03400	.81770	-.03519	.00190	-.00110	.00000	.64500	.01850
.201	16.650	.90540	.21830	.03950	.93000	-.05039	.00320	-.00210	-.00300	.64400	.02070
.201	18.740	1.00400	.30690	.02610	1.04940	-.03200	.00310	-.00200	-.00100	.65000	.02494
.201	20.800	1.07010	.38030	.02900	1.13550	-.02456	.00110	-.00220	.00000	.65000	.02788
.201	22.840	1.10790	.44330	.03780	1.19310	-.02159	.00240	.00060	-.00200	.64800	.03160
.201	24.880	1.11630	.49550	.05410	1.22110	-.02015	.00140	.00100	-.00100	.64400	.03780
.201	26.919	1.13650	.54950	.06950	1.26210	-.02449	.00090	.00190	-.00100	.64000	.04539
.201	28.940	1.16490	.60950	.08380	1.31440	-.03044	.00280	.00360	-.00700	.63700	.05106
.201	30.980	1.18290	.66770	.09720	1.35790	-.03655	.00350	.00430	-.00900	.63400	.05613
	GRADIENT	.04862	.00059	.00214	.04929	-.00068	-.00001	.00001	.00081	.00211	.00003

OA71C B16C5D7J32F1W87 E18V3R3X19 (RDU033) (20 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.9974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0405 SCALE

PARAMETRIC DATA

ALPHA = .000 BDFLAP = -18.000
ELEVON = .000 AILRON = .000
RUDDER = .000 NACBTA = 5.000
NACX/L = .000 NACLIP = 7.000

RUN NO. 33/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.100	.08430	.02570	-.01310	.08430	.02568	-.00340	.00090	.22500	.71500	.01845
.201	-5.060	.07630	.03350	-.00620	.07630	.03348	-.00230	.00070	.11100	.68900	.01528
.201	.000	.07040	.03760	-.00180	.07040	.03760	.00170	-.00170	-.00100	.66900	.01448
.201	5.030	.06980	.03310	-.00590	.06980	.03313	.00550	-.00340	-.11600	.69000	.01548
.201	10.100	.07610	.02700	-.01110	.07610	.02698	.00700	-.00370	-.22900	.71200	.01724
	GRADIENT	-.00064	-.00004	.00003	-.00064	-.00003	.00077	-.00041	-.02250	.00010	.00002

CATIC S1SC507J02F1W67 S1B/0R2X1S (GOJ034) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9343 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.5625 SCALE				

PARAMETRIC DATA

ALPHA =	10.000	SDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	MACRTA =	5.000
MACH/L =	.000	MACLIP =	7.000

RUN NO. 34/ 0 RNVL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-10.130	.58965	.09645	.01125	.59715	-.01387	-.00225	.01450	.23195	.65375	.02597
.251	-5.060	.58822	.10560	.01655	.59675	-.00772	-.00195	.00750	.11400	.65000	.01671
.251	-.025	.58780	.10390	.02115	.59690	-.00426	.00125	-.00180	.00000	.64750	.01597
.251	5.010	.58925	.09990	.01815	.59745	-.00224	.00240	-.01375	-.11000	.64900	.01613
.251	10.115	.58425	.09195	.01290	.59150	-.01393	.00620	-.01825	-.21650	.65250	.01948
	GRADIENT	-.00030	-.00041	.00016	-.00031	-.00035	.00053	-.00178	-.02225	-.00015	-.00006

CATIC S1SC507J02F1W67 S1B/0R2X1S (GOJ035) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9343 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.5625 SCALE				

PARAMETRIC DATA

BETA =	.000	SDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	MACRTA =	5.000
MACH/L =	.000	MACLIP =	7.000

RUN NO. 35/ 0 RNVL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-3.910	.17380	.02580	-.14375	.16875	.56560	.00060	-.00250	.00000	.97500	.02468
.251	-1.855	.27125	.03815	-.14575	.26815	.56628	.00060	-.00245	.00200	.85650	.02591
.251	-.795	.31880	.04230	-.14350	.31775	.56579	.00030	-.00210	.00200	.82150	.02557
.251	.230	.36450	.04745	-.14195	.36480	.56598	.00030	-.00195	.00200	.79800	.02545
.251	1.290	.41230	.05330	-.13790	.41380	.56426	.00020	-.00160	.00450	.77900	.02528
.251	2.280	.45980	.05980	-.13510	.45960	.56157	.00020	-.00190	.00300	.76500	.02518
.251	4.370	.55310	.06645	-.12960	.55990	.55789	.00020	-.00220	.00400	.74200	.01998
.251	6.430	.66940	.11990	-.13180	.67880	.54412	-.00010	-.00240	.00400	.72900	.02546
.251	8.540	.78570	.15260	-.13110	.79975	.53428	.00050	-.00220	.00500	.71800	.02625
.251	10.600	.89480	.18980	-.12750	.91450	.52174	.00060	-.00220	.00500	.70900	.02571
.251	12.700	1.00980	.23270	-.12000	1.02780	.50696	.00070	-.00200	.00400	.70150	.02145
.251	14.775	1.09400	.28070	-.11030	1.12990	-.00765	.00200	-.00220	.00200	.69450	.02279
.251	16.850	1.18510	.33740	-.10110	1.23200	-.02075	.00210	-.00370	.00000	.68900	.02583
.251	18.870	1.19410	.42990	-.09280	1.28890	.02549	.00000	-.01180	.01300	.68650	.03337
.251	20.900	1.21890	.49220	-.07630	1.31430	.02478	.00180	-.00240	.00250	.68000	.03744
.251	22.990	1.23300	.54655	-.04290	1.34870	.02222	.00130	-.00320	.00490	.67450	.04147
.251	24.960	1.23035	.58990	-.02470	1.36430	.01548	.00030	.00160	.00150	.66800	.04779
.251	27.000	1.24180	.62880	-.00220	1.38970	.01535	.00160	.00850	-.01500	.66300	.05507
.251	29.030	1.25490	.66240	.01955	1.43230	-.00361	.00225	.00490	-.01100	.65900	.06311
.251	31.040	1.27470	.73625	.03180	1.47180	-.02660	.00160	-.00310	.00400	.65200	.06662
	GRADIENT	.04565	.00518	.00248	.04684	-.00137	-.00014	.00006	.00045	-.02653	-.00015

OA71C B16C507J33F1W07 C18V3R3X19 (R0U036) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.000	NACZIP =	7.000

RUN NO. 36/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-4.190	-.13200	.04460	-.01030	-.13490	.03505	.00190	-.00150	-.00600	.63200	.01439
.251	-2.040	-.03500	.03940	-.00650	-.03640	.03818	.00210	-.00150	-.00400	.59600	.01445
.251	-1.010	.01460	.03225	-.00420	.01390	.03846	.00200	-.00130	-.00500	.76900	.01429
.251	.040	.06300	.03850	-.00200	.06380	.03848	.00200	-.00140	-.00300	.67100	.01447
.251	1.060	.11530	.04010	.00060	.11600	.03796	.00190	-.00150	-.00100	.65700	.01433
.251	2.120	.16720	.04180	.00310	.16870	.03563	.00190	-.00160	-.00200	.65300	.01435
.251	4.190	.26740	.04850	.00780	.27030	.02886	.00150	-.00190	.00000	.64900	.01460
.251	6.250	.36910	.06020	.01180	.37340	.01971	.00120	-.00210	.00150	.64800	.01478
.251	8.310	.47530	.07900	.01600	.48170	.00943	.00100	-.00240	.00190	.64800	.01480
.251	10.390	.58560	.10350	.02080	.59460	-.00379	.00120	-.00240	.00190	.64700	.01616
.251	12.510	.69620	.13620	.02520	.70920	-.01785	.00130	-.00260	.00200	.64600	.01672
.251	14.570	.80280	.17550	.03140	.82110	-.03212	.00150	-.00180	.00200	.64600	.01875
.251	16.650	.90760	.22225	.03620	.93320	-.04730	.00300	-.00250	-.00100	.64600	.02079
.251	18.750	1.00280	.30900	.02850	1.04890	-.02975	.00250	-.00170	.00000	.65000	.02559
.251	20.795	1.06580	.38160	.02990	1.13180	-.02170	.00060	-.00170	.00300	.65000	.02802
.251	22.840	1.10130	.44420	.03940	1.18740	-.01822	.00130	-.00080	.00400	.64800	.03142
.251	24.880	1.11940	.49740	.05560	1.22480	-.01983	.00070	.00130	.00300	.64300	.03650
.251	26.900	1.13180	.54870	.07030	1.25760	-.02283	.00010	.00340	.00000	.64000	.04458
.251	28.970	1.15850	.60700	.08600	1.30760	-.03026	.00200	.00430	-.00700	.63600	.05122
.251	30.960	1.17410	.66330	.09960	1.34810	-.03523	.00230	.00330	-.00600	.63300	.05614
	GRADIENT	.04228	.00551	.00221	.04898	-.00370	-.00005	-.00005	.00073	.00158	.00002

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU037) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.000	NACLIP =	7.000

RUN NO. 37/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.090	-.13250	.04420	-.01040	-.13530	.03469	.00160	-.00150	-.00600	.63200	.01429
.201	-2.010	-.03670	.03890	-.00600	-.03800	.03759	.00180	-.00140	-.00600	.60300	.01406
.201	-.990	.01270	.03750	-.00390	.01210	.03772	.00170	-.00130	-.00500	.77700	.01448
.201	.040	.06270	.03820	-.00170	.06280	.03817	.00200	-.00150	-.00300	.67000	.01440
.201	1.100	.11650	.03920	.00130	.11730	.03704	.00180	-.00160	-.00100	.65500	.01451
.201	2.120	.16560	.04110	.00380	.16700	.03500	.00180	-.00180	-.00100	.65100	.01472
.201	4.190	.26470	.04830	.00840	.26750	.02889	.00140	-.00190	.00000	.64800	.01468
.201	6.260	.36710	.06120	.01240	.37160	.02084	.00110	-.00200	.00100	.64800	.01470
.201	8.330	.47530	.08050	.01780	.48190	.01079	.00110	-.00210	.00000	.64600	.01540
.201	10.420	.58090	.10630	.02270	.59060	-.00048	.00140	-.00200	.00000	.64600	.01603
.201	12.500	.68640	.13910	.02880	.70030	-.01285	.00170	-.00230	.00100	.64500	.01724
.201	14.640	.79370	.17890	.03520	.81320	-.02749	.00140	-.00190	.00200	.64400	.01905
.201	16.670	.89660	.22670	.03990	.92400	-.04012	.00140	-.00340	.00100	.64400	.02110
.201	18.750	.98920	.31490	.03290	1.03800	-.01978	.00170	-.00290	.00200	.64800	.02492
.201	20.840	1.06230	.38160	.03770	1.12850	-.02128	.00010	-.00490	.00600	.64800	.02780
.201	22.860	1.10790	.44920	.04440	1.19540	-.01663	.00140	-.00110	.00100	.64600	.03092
.201	24.900	1.13400	.50610	.05880	1.24160	-.01852	.00040	.00140	.00300	.64300	.03521
.201	26.930	1.13790	.55550	.07570	1.26610	-.02019	-.00030	-.00190	.00500	.63800	.04367
.201	28.960	1.15200	.61040	.09150	1.30350	-.02384	.00080	.00200	-.00200	.63400	.05138
.201	30.980	1.17170	.67170	.10370	1.35030	-.02743	.00000	.00550	-.00800	.63200	.05445
	GRADIENT	.04825	.00052	.00230	.04892	-.00067	-.00002	-.00006	.00087	.00084	.00007

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU038) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

ALPHA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.000	NACLIP =	7.000

RUN NO. 38/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.120	.06230	.02550	-.01180	.06230	.02549	-.00290	.00080	.22500	.71100	.01828
.201	-5.060	.07230	.03430	-.00575	.07230	.03425	-.00180	.00100	.11400	.68800	.01517
.201	.000	.06740	.03920	-.00140	.06740	.03919	.00200	-.00130	.00000	.66700	.01463
.201	5.040	.06520	.03500	-.00570	.06520	.03502	.00520	-.00320	-.11400	.69100	.01500
.201	10.100	.07060	.02690	-.01150	.07060	.02685	.00670	-.00340	-.22500	.71500	.01713
	GRADIENT	-.00070	.00007	.00000	-.00070	.00008	.00069	-.00042	-.02253	.00029	-.00002

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU039) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

ALPHA =	10.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACV/L =	.000	NACLIP =	7.000

RUN NO. 39/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.120	.58640	.09610	.01090	.59410	-.01131	-.00200	.01460	.23000	.65300	.02102
.201	-5.060	.58480	.10210	.01740	.59360	-.00514	-.00120	.00740	.11400	.64900	.01764
.201	.000	.58210	.10650	.02240	.59170	-.00032	.00150	-.00200	.00100	.64600	.01611
.201	5.040	.58200	.10240	.01920	.59090	-.00422	.00330	-.01080	-.11000	.64800	.01689
.201	10.130	.57740	.09550	.01430	.58510	-.01017	.00380	-.01760	-.23200	.65100	.01998
	GRADIENT	-.00028	.00003	.00018	-.00027	.00009	.00045	-.00180	-.02218	-.00010	-.00007

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU040) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	15.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACV/L =	.000	NACLIP =	7.000

RUN NO. 40/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-3.910	.17460	.05120	-.14800	.17070	.06307	.00130	-.00170	.00000	.97000	.02048
.201	-1.860	.26920	.05640	-.14410	.26720	.06521	.00130	-.00140	.00100	.85200	.02045
.201	-.830	.31780	.06050	-.14190	.31690	.06517	.00120	-.00160	.00200	.82000	.02045
.201	.220	.36500	.06570	-.13920	.36530	.06430	.00120	-.00150	.00200	.79600	.02020
.201	1.220	.40980	.07130	-.13570	.41130	.06252	.00100	-.00180	.00400	.77700	.02023
.201	2.250	.45520	.07760	-.13240	.45790	.05960	.00100	-.00150	.00400	.76300	.02044
.201	4.330	.55640	.09590	-.12990	.56200	.05365	.00090	-.00140	.00400	.74200	.02022
.201	6.[illegible]	.66480	.11930	-.12780	.67400	.04389	.00070	-.00200	.00500	.72700	.02010
.201	8.480	.77550	.15090	-.12490	.78880	.03490	.00120	-.00230	.00400	.71600	.02051
.201	10.580	.88100	.18860	-.11970	.90060	.02368	.00150	-.00200	.00400	.70700	.02090
.201	12.650	.97910	.23070	-.11150	1.00590	.01065	.00160	-.00170	.00300	.69900	.02178
.201	14.730	1.07260	.27770	-.10210	1.10790	-.00417	.00210	-.00030	.00100	.69200	.02291
.201	16.800	1.16990	.33550	-.09510	1.21700	-.01694	.00350	-.00050	.00000	.68700	.02563
.201	18.830	1.17110	.42760	-.08540	1.24650	.02665	.00280	.00150	-.00100	.68400	.03434
.201	20.870	1.20720	.48990	-.06930	1.30250	.02772	.00170	-.00660	.00700	.67900	.03714
.201	22.900	1.22170	.54050	-.04320	1.33570	.02240	.00090	-.00550	.00800	.67100	.04120
.201	24.930	1.22910	.58920	-.01870	1.36290	.01625	-.00050	-.00640	.01400	.66400	.04727
.201	26.980	1.24570	.64270	.00260	1.40170	.00756	.00030	.00350	-.00400	.65900	.05531
.201	28.990	1.25540	.69590	.02190	1.43540	.00011	.00120	.00080	-.00200	.65400	.06132
.201	31.020	1.27410	.73950	.03540	1.47300	-.02289	.00110	-.00240	.00400	.65100	.06427
	GRADIENT	.04606	.00537	.00236	.04721	-.00119	-.00006	.00002	.00055	-.02620	-.00003

OA71C B16C5D7J34F1W87 E18V3R3X19 (RDU041) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2259 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0455 SCALE				

PARAMETRIC DATA

BETA =	.000	BOFLAP =	-18.000
ELEVON =	-10.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.000	NACLIP =	7.000

RUN NO. 41/ 0 RM/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-4.200	-.34110	.06200	.07940	-.34480	.03763	.00060	-.00130	-.00400	.74200	.00824
.251	-2.120	-.24070	.05060	.08390	-.24240	.04163	.00090	-.00110	-.00300	.78300	.00947
.251	-1.090	-.19150	.04640	.08620	-.19190	.04277	.00100	-.00090	-.00300	.82000	.00962
.251	-.540	-.13940	.04240	.08880	-.13940	.04328	.00120	-.00090	-.00250	.88700	.00974
.251	1.010	-.08920	.04060	.09180	-.08850	.04221	.00110	-.00110	.00000	1.03300	.00973
.251	1.990	-.04010	.04010	.09480	-.03870	.04149	.00110	-.00060	-.00300	1.53500	.00985
.251	4.070	.05940	.04040	.10130	.06210	.03607	.00110	-.00100	.00000	.97700	.01015
.251	6.190	.16080	.04650	.10680	.16490	.02898	.00090	-.00130	.00000	.42800	.00994
.251	8.240	.26230	.05800	.11310	.26790	.01984	.00090	-.00090	.00000	.53800	.01054
.251	10.290	.36680	.07580	.11980	.37430	.00956	.00140	-.00090	.00000	.54900	.01199
.251	12.380	.47190	.10070	.12590	.48250	-.00280	.00100	-.00080	.00000	.56600	.01355
.251	14.450	.57760	.13110	.13120	.59250	-.01720	.00240	-.00060	.00000	.58000	.01561
.251	16.560	.68440	.16890	.13830	.70410	-.03327	.00320	-.00020	-.00400	.58900	.01703
.251	18.620	.78320	.24930	.12490	.82180	-.01388	.00390	.00090	-.00500	.60500	.02054
.251	20.690	.86740	.31110	.12450	.92130	-.01546	.00240	-.00230	.00000	.61100	.02283
.251	22.750	.93700	.37010	.12680	1.00720	-.02112	.00330	-.00240	.00000	.61400	.02560
.251	24.800	.97560	.42840	.13480	1.06530	-.02542	.00150	-.00140	.00000	.61400	.02959
.251	26.850	1.01230	.49000	.14420	1.12450	-.02511	.00090	-.00090	.00200	.61400	.03574
.251	28.880	1.04160	.54740	.15450	1.17640	-.02583	.00170	.00010	.00100	.61300	.04228
.251	30.910	1.07910	.61190	.16070	1.24020	-.02947	.00160	.00670	-.01190	.61300	.04784
	GRADIENT	.04850	-.00269	.00265	.04927	-.00316	.00006	.00005	.00044	-.02182	.00515

CATIC [illegible] (PROGRAM) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	CREF =	42.9374 INCHES		
LREF =	19.2269 INCHES	XMRP =	.0000 INCHES		
SPAN =	37.9249 INCHES	ZMRP =	16.2500 INCHES		
SCALE =	.5625 SCALE				

PARAMETRIC DATA

BETA =	.000	DOFLAP =	-10.000
ELEVON =	.000	AILERON =	10.000
RUDDER =	.000	MACRTA =	5.000
MACRAL =	.000	MACLIP =	7.000

RUN NO. 42/ 0 PNVL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.25	-4.11	-.1299	.0116	-.0120	-.1275	.0426	.0175	.0169	-.0390	.6280	.0154
.25	-2.04	-.0640	.0076	-.0076	-.0680	.0424	.0135	.0079	-.0410	.5800	.0152
.25	.03	.0160	.0068	-.0029	.0161	.0474	.0088	.0069	-.0430	.6710	.0153
.25	1.10	.1249	.0086	-.0016	.1295	.0483	.0081	.0041	-.0430	.6000	.0159
.25	2.10	.1748	.0104	.0010	.1810	.0469	.0082	.0055	-.0440	.6550	.0162
.25	4.15	.2865	.0135	.0076	.2930	.0357	.0065	.0026	-.0450	.6490	.0164
.25	6.25	.3837	.0195	.0126	.3920	.0317	.0060	.0030	-.0470	.6470	.0173
.25	8.32	.4727	.0261	.0186	.4858	.0302	.0045	.0026	-.0490	.6490	.0181
.25	10.40	.5621	.0340	.0245	.5765	.0341	.0035	.0020	-.0510	.6450	.0187
.25	12.48	.6226	.0420	.0316	.6575	-.0252	.0025	.0025	-.0540	.6400	.0199
.25	14.98	.7015	.0535	.0386	.7395	-.0175	.0025	.0025	-.0570	.6400	.0217
.25	16.96	.7575	.0625	.0455	.8199	-.0331	.0026	.0025	-.0590	.6425	.0235
.25	18.79	.8195	.0705	.0525	1.0275	-.0252	.0175	.0025	-.0615	.6450	.0215
.25	20.77	1.0170	.0825	.0595	1.1075	-.0478	.0035	.0120	-.0600	.6470	.0222
.25	22.82	1.0815	.0935	.0662	1.1475	-.0355	.0010	.0085	-.0655	.6400	.0221
.25	24.84	1.0960	.0990	.0686	1.1975	-.0615	.0025	.0100	-.0680	.6360	.0232
.25	26.88	1.1175	.1025	.0695	1.2475	-.0126	.0025	.0155	-.0695	.6265	.0247
.25	28.96	1.1530	.1175	.0695	1.3285	-.0183	.0020	.0025	-.0810	.6140	.0269
.25	30.97	1.1985	.1315	.1025	1.3985	-.0212	.0025	.0025	-.0855	.6110	.0274
	GRADIENT	.0477	.0072	.0029	.0485	-.0043	.0024	.0043	-.0081	.0025	-.0001

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU043) (20 OCT 75)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-10.000
ELEVON =	.000	AILRON =	10.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.270	NACLIP =	7.000

RUN NO. 43/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.090	-.12370	.05210	-.00700	-.12710	.04315	.00720	.03640	-.03900	.64000	.01482
.201	-2.030	-.02820	.04820	-.00460	-.02990	.04716	.00810	.03730	-.04200	.60400	.01461
.201	-.970	.02070	.04740	-.00350	.01990	.04781	.00830	.03780	-.04200	.72400	.01551
.201	.070	.06840	.04830	-.00290	.06840	.04821	.00840	.03850	-.04400	.67500	.01496
.201	1.080	.11850	.04970	-.00110	.11940	.04750	.00860	.03890	-.04400	.66300	.01505
.201	2.100	.16650	.05130	.00060	.16830	.04521	.00890	.03930	-.04500	.65800	.01513
.201	4.170	.26570	.05860	.00310	.26930	.03913	.00945	.04040	-.04900	.65500	.01530
.201	6.260	.36540	.07010	.00710	.37090	.02985	.00950	.04070	-.05000	.65300	.01551
.201	8.320	.46510	.08870	.01170	.47310	.02043	.00990	.04080	-.05200	.65100	.01617
.201	10.390	.56530	.11360	.01510	.57660	.00975	.01010	.04140	-.05400	.65000	.01648
.201	12.480	.67280	.14540	.01840	.68830	-.00344	.01110	.04230	-.05800	.65000	.01768
.201	14.560	.77780	.18410	.02360	.79910	-.01738	.01180	.04330	-.06000	.64900	.01930
.201	16.640	.88010	.22830	.02780	.90860	-.03334	.01260	.04340	-.06400	.64900	.02121
.201	18.720	.98060	.30020	.02090	1.02510	-.03036	.01810	.04810	-.07500	.65200	.02316
.201	20.790	1.02010	.38120	.02260	1.08910	-.00565	.00690	.03510	-.04800	.65200	.02803
.201	22.800	1.05790	.43430	.03550	1.14350	-.00976	.00570	.02740	-.03800	.64800	.03329
.201	24.830	1.06950	.48260	.05020	1.17330	-.01123	.00330	.02340	-.02800	.64400	.03906
.201	26.870	1.09150	.53770	.06170	1.21670	-.01369	.00140	.02220	-.01800	.64100	.04816
.201	28.910	1.12490	.60330	.07140	1.27640	-.01572	.00080	.01720	-.00500	.63900	.05200
.201	30.930	1.14000	.65940	.08230	1.31680	-.02053	.00070	.01440	.00200	.63700	.05456
	GRADIENT	.04717	.00079	.00123	.04801	-.00046	.00025	.00049	-.00111	.00252	.00006

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU044) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	-10.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	270	NACLIP =	7.000

RUN NO. 44/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAP
.201	-4.190	-.33740	.06130	.06190	-.34100	.03649	.00110	-.00060	-.00500	.74500	.00912
.201	-2.120	-.23960	.05010	.05490	-.24130	.04122	.00110	-.00050	-.00500	.78500	.00951
.201	-1.080	-.18890	.04630	.05670	-.18970	.04276	.00100	-.00030	-.00500	.82300	.00952
.201	-.030	-.14100	.04310	.05840	-.14100	.04305	.00100	-.00040	-.00200	.88400	.00973
.201	1.000	-.09200	.04100	.06030	-.09130	.04263	.00110	-.00010	-.00400	1.01300	.00961
.201	2.000	-.04290	.03960	.06250	-.04150	.04109	.00100	-.00030	-.00300	1.45600	.01007
.201	4.070	.05660	.03980	.06670	.05930	.03567	.00080	-.00040	.00000	.07700	.01013
.201	6.130	.15280	.04410	.15100	.15670	.02753	.00090	-.00060	-.00200	.42900	.01038
.201	8.220	.25180	.05490	.15600	.25700	.01833	.00090	-.00070	-.00100	.51200	.01073
.201	10.290	.35370	.07230	.11040	.36100	.00792	.00110	-.00080	-.00100	.55000	.01179
.201	12.390	.46090	.09720	.11440	.47100	-.00398	.00160	-.00080	.00000	.57300	.01326
.201	14.470	.56430	.12840	.11880	.57850	-.01669	.00230	-.00090	.00000	.58600	.01482
.201	16.540	.66930	.16560	.12430	.68880	-.03184	.00290	-.00110	-.00100	.59500	.01681
.201	18.620	.76910	.24020	.11130	.80560	-.01793	.00140	-.00280	.00200	.61000	.02049
.201	20.690	.84250	.30530	.11020	.89600	-.01207	.00240	-.00380	.00000	.61600	.02448
.201	22.740	.91610	.36100	.11270	.98450	-.02127	.00270	-.00090	.00000	.61900	.02727
.201	24.800	.95240	.41430	.11730	1.03840	-.02345	.00260	-.00020	-.00100	.61900	.03202
.201	26.830	.98630	.47230	.12440	1.09330	-.02371	.00100	.00160	.00000	.61900	.03812
.201	28.880	1.03830	.54075	.13020	1.17030	-.02823	.00100	.00200	-.00100	.62000	.04146
.201	30.930	1.06480	.59900	.14010	1.22130	-.03347	.00090	.00190	.00100	.61800	.04479
	GRADIENT	.04765	-.00259	.00180	.04841	-.00008	-.00003	.00003	.00058	-.02622	.00012

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU045) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0455 SCALE				

PARAMETRIC DATA

BETA =	.000	BOFLAP =	-18.000
ELEVON =	15.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACVL =	.270	NACLIP =	7.000

RUN NO. 45/ 0 RNL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-3.900	.16820	.05240	-.14140	.16420	.06375	.00150	-.00210	-.00300	.96700	.02001
.201	-1.800	.26500	.05780	-.14020	.26110	.06605	.00150	-.00210	-.00200	.85200	.01994
.201	-.790	.31090	.06250	-.13940	.30940	.06688	.00120	-.00240	.00000	.82150	.01957
.201	.210	.35560	.06750	-.13770	.35590	.06618	.00120	-.00250	-.00100	.79800	.01943
.201	1.240	.40210	.07300	-.13550	.40360	.06429	.00110	-.00260	.00000	.78000	.01968
.201	2.280	.44680	.07980	-.13390	.44960	.06199	.00090	-.00270	.00000	.76650	.01939
.201	4.340	.54340	.09570	-.13010	.54910	.05426	.00080	-.00220	.00000	.74450	.01930
.201	6.430	.65390	.11860	-.13290	.66300	.04460	.00060	-.00260	.00100	.73100	.01948
.201	8.500	.76540	.15020	-.13400	.77920	.03531	.00050	-.00310	.00500	.72100	.02004
.201	10.590	.86810	.18740	-.12890	.88770	.02462	.00110	-.00290	.00400	.71100	.02009
.201	12.670	.96870	.22970	-.12450	.99550	.01160	.00200	-.00300	.00100	.70450	.02173
.201	14.750	1.06820	.27840	-.11880	1.10390	-.00268	.00270	-.00220	.00000	.69800	.02316
.201	16.810	1.17040	.33570	-.11540	1.21750	-.01715	.00360	-.00130	-.00300	.69300	.02729
.201	18.890	1.18070	.41600	-.10260	1.25180	.01213	-.00490	-.02480	.03000	.68900	.03397
.201	20.900	1.20360	.[illegible]	-.09030	1.29840	.02606	.00390	-.00220	-.00300	.68450	.03918
.201	22.910	1.21140	.53430	-.06550	1.32380	.02053	.00345	-.00050	-.00400	.67700	.04338
.201	24.930	1.21210	.57610	-.03690	1.34200	.01143	.00230	-.00190	.00100	.66900	.05117
.201	26.950	1.20890	.62230	-.01450	1.35960	.00670	.00170	.00170	.00000	.66300	.05614
.201	29.000	1.23530	.68700	-.00120	1.41350	.00189	.00140	-.00020	.00400	.66000	.06191
.201	31.040	1.24890	.72430	.01450	1.44360	-.02337	.00080	-.00170	.01200	.65600	.06527
	GRADIENT	.04543	.00528	.00143	.04660	-.00113	-.00009	-.00004	.00037	-.02563	-.00009

CA71C B16C507J34F1W87 E18V3R3X10 (RDU046) (20 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.5974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0405 SCALE

PARAMETRIC DATA

BETA = .000 BOFLAP = -18.000
ELEVON = .000 AILRON = .000
RUDDER = .000 NACBTA = 5.000
NACX/L = .270 NACLIP = 7.000

RUN NO. 46/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.080	-.13100	.04520	-.00580	-.13390	.03576	.00110	-.00120	-.00800	.64400	.01367
.201	-2.020	-.03490	.04090	-.00340	-.03590	.03926	.00110	-.00140	-.00600	.62800	.01371
.201	-.970	.01610	.04000	-.00210	.01550	.04030	.00120	-.00120	-.00800	.70000	.01378
.201	.090	.06490	.04010	-.00110	.06490	.04007	.00110	-.00100	-.00900	.66800	.01405
.201	1.080	.11370	.04130	.00050	.11440	.03921	.00100	-.00140	-.00900	.65800	.01411
.201	2.100	.16300	.04320	.00220	.16440	.03718	.00080	-.00140	-.00200	.65500	.01401
.201	4.180	.26270	.04990	.00500	.26570	.03067	.00050	-.00150	-.00100	.65300	.01406
.201	6.250	.36490	.06040	.00780	.36930	.02032	.00030	-.00200	.00000	.65200	.01449
.201	8.330	.46700	.07850	.01070	.47340	.01009	.00030	-.00190	.00000	.65100	.01517
.201	10.420	.57180	.10400	.01450	.58120	-.00105	.00030	-.00190	.00000	.65100	.01577
.201	12.490	.67820	.13800	.01690	.69200	-.01198	.00110	-.00230	.00100	.65100	.01686
.201	14.570	.78060	.17540	.02250	.79970	-.02671	.00180	-.00250	.00000	.64900	.01844
.201	16.640	.88600	.22110	.02600	.91230	-.04192	.00350	-.00290	-.00500	.64900	.02114
.201	18.720	.99440	.28240	.02230	1.03250	-.05184	.00190	-.00120	-.00100	.65200	.02493
.201	20.770	1.04610	.37350	.01910	1.11060	-.02192	.00180	-.00440	.00100	.65300	.03052
.201	22.810	1.08150	.43420	.02770	1.16530	-.01917	.00260	-.00170	.00000	.65100	.03470
.201	24.880	1.10330	.48690	.04230	1.20580	-.02212	.00200	-.00100	.00000	.64700	.04179
.201	26.900	1.11350	.53890	.05510	1.23690	-.02318	.00100	.00210	-.00100	.64400	.04901
.201	28.990	1.14790	.60290	.06980	1.29580	-.02784	.00060	-.00070	.00700	.64000	.05001
.201	30.990	1.16610	.66170	.08040	1.34030	-.03244	.00130	-.00150	.03700	.63800	.05327
	GRADIENT	.04767	.00059	.00131	.04837	-.00059	-.00007	-.00003	.00090	.00104	.00006

CA71C B16C507J34F1W87 E18V3R3X10 (RDU047) (20 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.5974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0405 SCALE

PARAMETRIC DATA

ALPHA = .000 BOFLAP = -18.000
ELEVON = .000 AILRON = .000
RUDDER = .000 NACBTA = 5.000
NACX/L = .270 NACLIP = 7.000

RUN NO. 47/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.090	.07830	.02610	-.01060	.07840	.02607	-.00480	.00080	.22450	.70800	.01776
.201	-5.050	.06940	.03440	-.00410	.06945	.03437	-.00290	.00090	.11250	.68100	.01466
.201	.000	.06460	.03940	-.00030	.06460	.03936	.00110	-.00130	-.00200	.66200	.01384
.201	5.020	.06370	.03500	-.00470	.06370	.03505	.00520	-.00360	-.11600	.68600	.01477
.201	10.090	.07020	.02640	-.01010	.07030	.02638	.00760	-.00360	-.23200	.71100	.01726
	GRADIENT	-.00057	.00006	-.00006	-.00057	.00007	.00080	-.00045	-.02264	.00049	.00001

OA71C B16C507J34F1W87 E18V3R3X10 (RDU048) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

ALPHA =	10.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.270	NACLIP =	7.000

RUN NO. 48/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.090	.57640	.09450	.00140	.58410	-.01581	-.00420	.01410	.23600	.65900	.02101
.201	-5.040	.57450	.10080	.00880	.58320	-.00462	-.00240	.00740	.11500	.65400	.01725
.201	.010	.57010	.10420	.01410	.57960	-.00021	.00040	-.00190	.00300	.65100	.01581
.201	5.040	.56800	.09980	.01140	.57670	-.00410	.00290	-.01160	-.10900	.65200	.01633
.201	10.100	.56730	.09510	.00550	.57510	-.00861	.00514	-.01890	-.23200	.65600	.01924
	GRADIENT	-.00064	-.00008	.00028	-.00064	.00005	.00053	-.00168	-.02222	-.00020	-.00009

OA71C B16C507J34F1W87 E18V3R3X10 (RDU049) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.530	NACLIP =	7.000

RUN NO. 49/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.100	-.13300	.04680	.00170	-.13610	.03702	.00150	-.00130	-.00600	.66400	.01358
.201	-2.010	-.03720	.04120	.00190	-.03880	.03995	.00080	-.00130	-.00900	.67700	.01368
.201	-1.000	.01020	.04090	.00170	.00940	.04075	.00080	-.00130	-.00400	.59300	.01383
.201	.040	.06130	.04080	.00240	.06140	.04016	.00100	-.00130	-.00500	.64500	.01400
.201	1.070	.10570	.04080	.00400	.10640	.03890	.00120	-.00120	-.00500	.64600	.01395
.201	2.130	.15440	.04210	.00480	.15590	.03838	.00120	-.00110	-.00500	.64900	.01418
.201	4.180	.25230	.04820	.00570	.25510	.02980	.00090	-.00090	-.00400	.65100	.01428
.201	6.240	.35480	.05810	.00680	.35900	.01921	.00050	-.00090	-.00200	.65300	.01461
.201	8.310	.45850	.07900	.00680	.46450	.00798	.00020	-.00140	.00000	.65400	.01492
.201	10.390	.56570	.09930	.00830	.57430	-.00440	.00030	-.00130	.00000	.65400	.01558
.201	12.480	.67030	.12970	.00020	.68250	-.01807	.00120	-.00130	-.00200	.65500	.01607
.201	14.540	.77680	.17130	.00840	.79470	-.02917	.00140	-.00240	-.00100	.65600	.01667
.201	16.610	.87880	.22080	.01020	.90520	-.03987	.00380	-.00160	-.00900	.65500	.02205
.201	18.680	.97290	.29857	.00460	1.01690	-.02900	-.00040	-.00660	.00100	.65800	.02687
.201	20.790	1.04790	.36920	.00490	1.11070	-.02613	.00200	-.00290	-.00900	.65800	.03004
.201	22.810	1.09180	.42340	.01840	1.17040	-.03293	.00160	.00110	-.00900	.65400	.03421
.201	24.840	1.10260	.47390	.02920	1.19970	-.03324	-.00260	.00780	-.01300	.65100	.03909
.201	26.880	1.12750	.53420	.03930	1.24720	-.03331	-.00410	.00500	-.00300	.64800	.04658
.201	28.910	1.15030	.59610	.05090	1.29510	-.03429	-.00250	.00310	.00000	.64300	.04983
.201	30.920	1.15190	.65410	.06180	1.32430	-.03096	-.00250	.00670	-.00600	.64300	.05385
	GRADIENT	.04655	.00019	.00055	.04726	-.00087	-.00001	.00005	.00016	-.00125	.00009

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU050) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

ALPHA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.530	NACLIP =	7.000

RUN NO. 50/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.090	.06860	.02700	-.00650	.06860	.02699	-.00650	.00180	.22600	.69300	.01682
.201	-5.040	.06110	.03450	.00060	.06110	.03450	-.00330	.00160	.11000	.65600	.01446
.201	.000	.05910	.03940	.00300	.05910	.03936	.00100	-.00130	-.00100	.64100	.01391
.201	5.040	.05990	.03540	-.00060	.06000	.03536	.00560	-.00390	-.11400	.66300	.01520
.201	10.080	.06400	.02760	-.00570	.06400	.02759	.00930	-.00370	-.23100	.69200	.01747
	GRADIENT	-.00012	.00009	-.00012	-.00011	.00009	.00088	-.00055	-.02222	.00069	.00007

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU051) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

ALPHA =	10.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.530	NACLIP =	7.000

RUN NO. 51/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.100	.57620	.09200	-.00550	.58340	-.01352	-.00600	.01400	.23500	.66300	.01993
.201	-5.050	.57010	.09670	.00360	.57820	-.00783	-.00340	.00870	.11500	.65700	.01623
.201	-.020	.56790	.10040	.00820	.57670	-.00374	.00020	-.00110	.00100	.65400	.01578
.201	5.010	.56170	.09590	.00510	.56980	-.00703	.00390	-.01130	-.11100	.65200	.01620
.201	10.070	.56160	.09150	-.00010	.56890	-.01134	.00700	-.01850	-.23600	.66000	.01919
	GRADIENT	-.00083	-.00008	.00015	-.00083	.00008	.00073	-.00199	-.02247	-.00010	-.00000

OA71C B16C5D7J34F1W87 E18V3R3x10 (RDV053) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	-10.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.539	NACLIP =	7.000

RUN NO. 53/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.210	-.33310	.06390	.08890	-.33690	.03932	.00100	-.00110	-.00700	.75400	.00955
.201	-2.130	-.23880	.05240	.08980	-.24060	.04357	.00090	-.00080	-.00700	.79300	.00951
.201	-1.100	-.18770	.04860	.09050	-.18860	.04503	.00080	-.00080	-.00600	.83150	.00975
.201	-.060	-.13920	.04500	.09180	-.13930	.04492	.00080	-.00080	-.00600	.89500	.00968
.201	.950	-.09470	.04290	.09330	-.09390	.04452	.00100	-.00020	-.00700	1.01500	.00996
.201	1.990	-.04560	.04160	.09450	-.04410	.04322	.00100	.00000	-.00700	1.42500	.00985
.201	4.050	.05120	.04140	.09650	.05390	.03770	.00090	.00020	-.00600	.02100	.01042
.201	6.120	.14720	.04460	.09920	.15120	.02870	.00070	-.00010	-.00500	.42500	.01040
.201	8.180	.24920	.05400	.10280	.25430	.01804	.00060	-.00030	-.00400	.51500	.01099
.201	10.270	.34970	.06990	.10650	.35660	.00639	.00010	-.00100	-.00100	.55300	.01146
.201	12.350	.45110	.09090	.10950	.46010	-.00765	.00060	-.00030	-.00300	.57400	.01264
.201	14.430	.56210	.12480	.10780	.57550	-.01925	.00100	-.00050	-.00300	.59200	.01419
.201	16.540	.66910	.16960	.10370	.68970	-.02792	.00210	-.00120	-.00400	.60600	.01758
.201	18.590	.76750	.23460	.10250	.80220	-.02236	-.00050	-.00340	.00000	.61400	.02035
.201	20.650	.85260	.29550	.10290	.90210	-.02428	.00150	-.00220	-.00600	.61900	.02282
.201	22.720	.91690	.35360	.10690	.98240	-.02794	.00180	-.00050	-.00800	.62100	.02625
.201	24.760	.94880	.40120	.11070	1.02960	-.03304	-.00180	.00300	-.00900	.62100	.03145
.201	26.810	.98850	.46340	.11390	1.09130	-.03241	-.00350	.00500	-.00800	.62200	.03807
.201	28.850	1.03390	.53170	.11850	1.16210	-.03319	-.00270	.00420	-.00300	.62300	.04185
.201	30.850	1.04630	.59060	.12230	1.20110	-.02957	-.00260	.00630	-.00600	.62300	.04593
	GRADIENT	.04654	-.00271	.00098	.04733	-.00018	-.00000	.00017	.00007	-.03419	.00010

OA71C B16C5D7J34F1W87 E18V3R3X10 (RDU054) (20 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.5974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0455 SCALE

PARAMETRIC DATA

BETA = .000 BDFLAP = -18.000
ELEVON = .000 AILRON = 10.000
RUDDER = .000 NACBTA = 5.000
NACX/L = .530 NACLIP = 7.000

RUN NO. 54/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.090	-.12150	.05480	.00010	-.12510	.04603	.00730	.03510	-.03700	.66000	.01525
.201	-2.020	-.02710	.04980	.00060	-.02880	.04884	.00790	.03610	-.04100	.66700	.01563
.201	-.950	.01940	.04860	.00100	.01860	.04899	.00830	.03660	-.04300	.63800	.01555
.201	.030	.06380	.04940	.00310	.06380	.04940	.00890	.03740	-.04600	.64200	.01580
.201	1.060	.11040	.05040	.00290	.11130	.04836	.00920	.03790	-.04600	.65000	.01557
.201	2.100	.15920	.05170	.00410	.16100	.04584	.00950	.03870	-.04800	.65000	.01609
.201	4.180	.25420	.05810	.00690	.25780	.03947	.00990	.03900	-.04900	.65000	.01596
.201	6.250	.35210	.06780	.00730	.35740	.02913	.01010	.03960	-.05200	.65200	.01614
.201	8.330	.45570	.08490	.00870	.46320	.01800	.01040	.04040	-.05300	.65300	.01649
.201	10.390	.56010	.10880	.01040	.57050	.00598	.01100	.04110	-.05600	.65300	.01718
.201	12.460	.65970	.14000	.01290	.67440	-.00569	.01160	.04150	-.05800	.65300	.01797
.201	14.560	.76590	.18070	.01420	.78670	-.01768	.01150	.04070	-.05800	.65300	.01972
.201	16.620	.86630	.23150	.01410	.89630	-.02593	.01390	.04180	-.06400	.65400	.02172
.201	18.700	.95090	.31100	.01000	1.00040	-.01040	.00670	.03390	-.04600	.65600	.02558
.201	20.760	1.02370	.37660	.01300	1.09070	-.01068	.00740	.03380	-.05100	.65500	.02889
.201	22.800	1.07040	.43480	.02120	1.15530	-.01397	.00600	.03140	-.04700	.65300	.03392
.201	24.820	1.08290	.48240	.03460	1.18540	-.01685	.00100	.03090	-.03900	.64900	.03833
.201	26.860	1.09060	.53420	.04970	1.21430	-.01623	-.00220	.02520	-.01900	.64500	.04438
.201	28.930	1.11740	.59700	.05920	1.26630	-.01806	-.00260	.02320	-.01300	.64300	.05019
.201	30.930	1.13150	.65870	.06790	1.30920	-.01660	-.00340	.02290	-.00700	.64100	.05532
	GRADIENT	.04538	.00043	.00083	.04625	-.00076	.00033	.00049	-.00150	-.00144	.00009

DATIC B16C50T134F1W67 E1BV383X10 (R2L5S5) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2293 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9249 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0455 SCALE				

PARAMETRIC DATA

BETA =	.000	BOFLAP =	-18.000
ELEVON =	15.000	AILERON =	.000
RUDDER =	.000	MACBTA =	5.000
MACH/L =	.500	MACLIP =	7.000

RUN NO. 55/ 0 RNL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CM	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-3.345	.16280	.03425	-.13130	.16170	.06853	.00110	-.00160	-.00200	.99300	.02035
.251	-1.865	.25840	.03900	-.13110	.23540	.06737	.00100	-.00170	-.00100	.84200	.02023
.251	-.840	.30480	.04260	-.13110	.30280	.06760	.00110	-.00170	-.00200	.81400	.01973
.251	.130	.34990	.04780	-.13040	.35010	.06670	.00100	-.00180	-.00190	.79300	.01953
.251	1.200	.38270	.05260	-.12980	.38410	.06537	.00120	-.00200	-.00200	.77700	.01917
.251	2.220	.44220	.05960	-.12910	.44300	.06235	.00130	-.00240	-.00300	.76600	.01934
.251	4.210	.52660	.06490	-.12680	.52470	.05826	.00120	-.00250	-.00190	.74400	.01901
.251	6.230	.60000	.11590	-.12640	.60390	.04289	.00120	-.00120	-.00200	.73100	.01946
.251	8.475	.75900	.14850	-.13520	.77230	.03357	.00090	-.00280	.00000	.72200	.02008
.251	10.530	.86220	.18150	-.13590	.87220	.02118	.00080	-.00450	.00200	.71500	.02048
.251	12.650	.96190	.22250	-.13320	.96700	.00742	.00060	-.00360	.00200	.70800	.02027
.251	14.680	1.05220	.27480	-.12740	1.08850	-.00120	.00220	-.00210	-.00190	.70100	.02032
.251	16.780	1.15210	.34220	-.12850	1.20700	-.00820	.00680	-.00190	-.01150	.69300	.02866
.251	18.810	1.20140	.42960	-.12490	1.27480	-.01950	.00250	-.00120	-.00200	.69400	.03511
.251	20.880	1.24570	.49240	-.11180	1.34040	-.01555	.00310	.00220	-.00700	.68900	.03858
.251	22.950	1.25800	.54790	-.09140	1.38120	-.01009	.00140	-.00240	-.00200	.68300	.04207
.251	24.910	1.24740	.59400	-.06000	1.37140	.00426	-.00090	.00060	-.00100	.67500	.04828
.251	26.960	1.23280	.62750	-.03360	1.38430	-.00014	-.00130	.00080	.00100	.66800	.05563
.251	28.950	1.24700	.68880	-.01760	1.42410	-.00296	-.00030	.00180	-.00200	.66400	.06139
.251	30.980	1.25720	.72930	-.00580	1.45340	-.00191	-.00060	.00270	-.00200	.66100	.06526
	GRADIENT	.04056	.00495	.00056	.04525	-.00128	.00003	-.00012	.00000	-.00254	-.00018

CATIC 2.4557 SUPERJET ELEVATRIM (FUSE#8) (25 OCT 73)

REFERENCE DATA

XREF =	4.4122 SQ.FT.	MRP =	43.5974 INCHES
YREF =	19.2239 INCHES	YMRP =	.0000 INCHES
ZREF =	37.9149 INCHES	ZMRP =	16.2000 INCHES
SCALE =	.2404 SCALE		

PARAMETRIC DATA

BETA =	.000	DEFLAP =	-10.000
ELEVON =	.000	AILERON =	.000
RUDDER =	.000	MACBTA =	5.000
MACAL =	.535	MACLIP =	7.000

RUN NO. 58/ 0 RNL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CM	CAF	CYN	CBL	CY	XCP/L	CAB
.20	-4.00	-.0885	.0440	-.0810	-.1020	.0476	-.0027	-.0026	-.0010	.6310	.0449
.20	-1.00	-.0080	.0300	-.0040	-.0040	.0290	-.0020	-.0020	.0000	.6410	.0439
.20	-.50	.0420	.0410	-.0060	.0420	.0400	-.0020	-.0020	.0010	.7510	.0432
.20	.00	.0870	.0500	-.0120	.0980	.0480	-.0020	-.0040	.0020	.7000	.0458
.20	1.00	.1350	.0740	-.0200	.1400	.0570	-.0040	-.0040	.0020	.6900	.0475
.20	2.00	.1850	.0920	-.0300	.1770	.0610	-.0040	-.0040	.0020	.6840	.0474
.20	4.00	.2770	.0120	-.0500	.2210	.0680	-.0040	-.0060	.0030	.6800	.0502
.20	6.00	.3700	.0870	-.0700	.2700	.0840	-.0020	-.0080	.0030	.6740	.0493
.20	8.00	.4700	.1150	-.0900	.3240	.0910	-.0060	-.0080	.0040	.6680	.0500
.20	10.00	.5600	.1340	-.1000	.3650	.0980	-.0060	-.0080	.0040	.6650	.0508
.20	12.00	.6700	.1660	-.1200	.4060	.1040	-.0080	-.0080	.0040	.6600	.0515
.20	14.00	.7700	.2040	-.1400	.4400	-.0060	-.0080	-.0060	.0040	.6600	.0535
.20	16.00	.8700	.2480	-.1600	.4740	-.0080	-.0080	-.0060	.0040	.6600	.0571
.20	18.00	.9600	.2980	-.1800	1.0230	.0030	.0040	-.0020	-.0020	.6600	.0581
.20	20.00	1.0360	.3600	.0000	1.0600	-.0040	.0060	-.0020	.0020	.6600	.0876
.20	22.00	1.0800	.4480	.0120	1.1000	.0060	.0040	-.0040	.0020	.6550	.0737
.20	24.00	1.0610	.4600	.0260	1.1700	.0020	.0020	-.0040	.0000	.6500	.0636
.20	26.00	1.0150	.5480	.0380	1.2080	-.0040	.0000	.0000	.0000	.6480	.0683
.20	28.00	1.0660	.6120	.0420	1.2420	-.0040	.0060	-.0020	.0060	.6470	.0818
.20	30.00	1.1280	.6820	.0470	1.2960	-.0060	.0040	-.0020	.0000	.6480	.0876
	GRADIENT	.0477	.0020	-.0008	.0475	.0002	.0002	-.0002	.0002	.0021	.0011

CATIC 2.4557 SUPERJET ELEVATRIM (FUSE#8) (25 OCT 73)

REFERENCE DATA

XREF =	4.4122 SQ.FT.	MRP =	43.5974 INCHES
YREF =	19.2239 INCHES	YMRP =	.0000 INCHES
ZREF =	37.9149 INCHES	ZMRP =	16.2000 INCHES
SCALE =	.2404 SCALE		

PARAMETRIC DATA

ALPHA =	.000	DEFLAP =	-10.000
ELEVON =	.000	AILERON =	.000
RUDDER =	.000	MACBTA =	5.000
MACAL =	.535	MACLIP =	7.000

RUN NO. 58/ 0 RNL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CM	CAF	CYN	CBL	CY	XCP/L	CAB
.20	-10.00	.1040	.0420	-.0130	.1060	.0420	-.0060	.0040	.0020	.7050	.0818
.20	-5.00	.0840	.0410	-.0110	.0940	.0400	-.0040	.0020	.0010	.7000	.0493
.20	.00	.0700	.0400	-.0100	.0800	.0400	-.0020	-.0000	.0000	.6900	.0482
.20	5.00	.0600	.0420	-.0140	.0800	.0420	.0020	-.0060	-.0020	.7150	.0504
.20	10.00	.0440	.0450	-.0210	.0660	.0480	.0020	-.0140	-.0020	.7200	.0792
	GRADIENT	-.0020	.0012	-.0015	-.0020	.0012	.0008	-.0008	-.0020	.0048	.0006

OA71C B16C5D7J35F1W87 E18V3R3X10 (RDU060) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

ALPHA =	10.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.530	NACLIP =	7.000

RUN NO. 60/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.070	.57610	.11120	-.00530	.58670	.00534	-.01130	.01040	.22900	.66300	.02020
.201	-5.060	.57310	.12350	-.00400	.58600	.01798	-.00850	.00270	.11800	.66200	.01766
.201	.000	.57240	.13560	-.00760	.58750	.03010	-.00810	-.00790	.02100	.66400	.01681
.201	5.030	.57360	.13480	-.01240	.58850	.02906	-.00580	-.01650	-.07800	.66700	.01635
.201	10.090	.57630	.12760	-.01500	.58980	.02153	-.00200	-.02370	-.19500	.66900	.01963
	GRADIENT	.00005	.00112	-.00083	.00025	.00110	.00027	-.00190	-.01942	.00050	-.00013

OA71C B16C5D7J35F1W87 E18V3R3X10 (RDU061) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	15.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.530	NACLIP =	7.000

RUN NO. 61/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-3.920	.18760	.06650	-.13640	.18260	.07928	-.00280	-.00520	.00700	.92700	.02099
.201	-1.850	.27650	.07450	-.13570	.27390	.08344	-.00270	-.00560	.00800	.83700	.02044
.201	-.800	.32050	.07840	-.13560	.31940	.08294	-.00230	-.00600	.00800	.81100	.02100
.201	.210	.36500	.08420	-.13500	.36530	.08290	-.00190	-.00630	.00800	.79200	.02095
.201	1.230	.40590	.09100	-.13500	.40770	.08223	-.00160	-.00660	.00800	.77800	.02066
.201	2.270	.45070	.09870	-.13490	.45420	.08076	-.00120	-.00700	.00900	.76600	.02062
.201	4.310	.53350	.11600	-.13510	.54070	.07550	-.00070	-.00790	.01000	.74900	.02056
.201	6.360	.63220	.14060	-.13550	.64390	.06964	-.00240	-.00810	.01200	.73500	.02057
.201	8.470	.73570	.17220	-.13390	.76310	.06194	-.00470	-.00860	.01900	.72300	.02127
.201	10.540	.83540	.20500	-.12940	.86880	.04862	-.00900	-.00890	.01900	.71300	.02180
.201	12.630	.93980	.24410	-.12520	.96690	.03359	-.00570	-.00798	.01800	.70600	.02235
.201	14.700	1.04150	.29340	-.12408	1.06160	.01947	-.00550	-.00850	.02000	.70000	.02352
.201	16.780	1.15350	.35700	-.12748	1.23759	.00861	-.00600	-.01440	.02500	.69700	.02575
.201	18.820	1.17490	.44920	-.11660	1.25660	.04634	.00140	-.00620	.00750	.69300	.03260
.201	20.860	1.21320	.50550	-.10200	1.31370	.04029	.00030	-.00720	.01300	.68700	.03757
.201	22.890	1.21210	.54919	-.07600	1.33030	.03424	.00060	-.00710	.01100	.68000	.04542
.201	24.910	1.18890	.58640	-.05090	1.32530	.03102	.00170	-.00140	.00100	.67300	.05304
.201	26.930	1.18810	.63160	-.04040	1.34540	.02501	.00170	-.00150	.00400	.67000	.05885
.201	28.950	1.21400	.66440	-.02910	1.38390	-.00630	.00390	-.00290	.00200	.66700	.06552
.201	30.990	1.23660	.70570	-.02060	1.42350	-.03175	.00440	-.00150	-.00200	.66500	.06658
	GRADIENT	.04208	.00599	.00017	.04356	-.00049	.00028	-.00033	.00032	-.02056	-.00004

OA71C B16C5D7J35F1W87 E18V3R3X10 (RDU062) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	-10.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.530	NACLIP =	7.000

RUN NO. 62/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.180	-.27680	.06290	.06800	-.28060	.04254	-.00140	-.00070	-.00300	.74600	.01089
.201	-2.090	-.17970	.05710	.06710	-.18170	.05049	-.00140	-.00080	-.00400	.79200	.01067
.201	-1.050	-.13210	.05550	.06690	-.13310	.05313	-.00130	-.00100	-.00300	.83900	.01055
.201	-.030	-.08480	.05440	.06660	-.08490	.05443	-.00120	-.00120	-.00100	.94000	.01089
.201	.980	-.03760	.05410	.06600	-.03670	.05480	-.00100	-.00140	-.00100	1.30300	.01107
.201	2.010	.00890	.05500	.06620	.01080	.05472	-.00030	-.00110	-.00200	-1.51900	.01141
.201	4.080	.09950	.05910	.06580	.10340	.05187	.00000	-.00200	-.00100	.43200	.01191
.201	6.160	.18870	.06910	.06820	.19500	.04847	-.00150	-.00380	.00300	.53400	.01212
.201	8.210	.28180	.08530	.07320	.29100	.04418	-.00450	-.00510	.01000	.56900	.01229
.201	10.260	.37860	.10420	.07660	.39110	.03512	-.00710	-.00550	.01400	.58900	.01383
.201	12.370	.47990	.12810	.08110	.49620	.02238	-.00800	-.00650	.01600	.60100	.01462
.201	14.425	.57670	.15690	.08520	.59760	.00841	-.00730	-.00590	.01600	.60900	.01602
.201	16.520	.67200	.19260	.09270	.69910	-.00647	-.00610	-.00540	.01400	.61200	.01722
.201	18.580	.76570	.26330	.08690	.80970	.00548	.00500	.00000	-.00200	.62100	.02165
.201	20.640	.83040	.31700	.09300	.88880	.00382	.00300	-.00120	.00000	.62200	.02370
.201	22.700	.88880	.36940	.09690	.96260	-.00226	.00500	-.00080	-.00600	.62400	.02721
.201	24.750	.91810	.42520	.10250	1.01180	.00171	.00240	.00040	-.00500	.62300	.03207
.201	26.790	.95090	.47840	.10800	1.06440	-.00155	.00150	.00360	-.00900	.62300	.04009
.201	28.860	.97980	.53340	.11100	1.11560	-.00587	.00180	.00190	-.00300	.62400	.04565
.201	30.840	1.00960	.59180	.11430	1.17030	-.00961	.00300	-.00300	.00800	.62500	.04950
	GRADIENT	.04569	-.00048	-.00027	.04662	.00110	.00019	-.00014	.00032	-.12461	.00014

OA71C B16C307J35F1W87 E18V3R3X19 (ROUGH) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2293 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2500 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	10.000
RUDDER =	.000	NACBTA =	5.000
NACW/L =	.530	NACLIP =	7.000

RUN NO. 63/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-4.000	-.09370	.00210	-.00980	-.09490	.00555	.00050	.00110	-.00200	.62000	.01424
.251	-1.990	.00050	.00140	-.01090	-.00190	.00143	.00120	.00140	-.00400	-1.82500	.01448
.251	-.340	.04770	.00220	-.01250	.04670	.00275	.00130	.00140	-.00400	.75100	.01433
.251	.140	.05670	.00480	-.01220	.05690	.00443	.00140	.00130	-.00400	.70500	.01465
.251	1.110	.13240	.00740	-.01120	.13370	.00474	.00170	.00120	-.00300	.62800	.01485
.251	2.140	.18340	.01130	-.01000	.18600	.00444	.00200	.00100	-.00500	.67900	.01466
.251	4.190	.26760	.01970	-.00960	.27270	.00997	.00200	.00070	-.00700	.67200	.01496
.251	6.250	.36250	.02950	-.00990	.37370	.00550	.00220	.00030	-.00700	.66900	.01510
.251	8.340	.46300	.04225	-.00880	.47530	.00958	.00270	.00040	-.00800	.66600	.01547
.251	10.420	.56700	.05700	-.00650	.58350	.00857	-.00010	.00110	-.00700	.66400	.01627
.251	12.490	.68825	.07190	-.00250	.69060	.00932	-.00025	.00160	-.00800	.66100	.01721
.251	14.580	.76540	.08695	.00220	.79330	.00949	-.00020	.00330	-.00900	.65800	.01784
.251	16.620	.85880	.09370	.00920	.89470	-.00563	.00020	.00290	-.00300	.65600	.01953
.251	18.720	.93960	.11600	.00560	.99780	.01646	.00650	.00400	-.00400	.65700	.02305
.251	20.770	.99760	.13220	.01260	1.07300	.01590	.00330	.00190	-.00600	.65500	.02657
.251	22.810	1.03140	.14820	.02390	1.12280	.01152	.00080	.00610	-.00700	.65200	.03336
.251	24.850	1.03550	.16250	.03230	1.14660	.01159	-.00010	.00450	-.00200	.64800	.03886
.251	26.870	1.04390	.17130	.04910	1.18130	.00829	-.00060	.00140	-.00100	.64500	.04625
.251	28.910	1.07580	.19510	.05430	1.22510	.00325	.00000	.00180	-.00300	.64400	.05305
.251	30.910	1.11090	.21510	.05940	1.28460	-.01737	.00060	.00140	.00000	.64300	.05934
	GRADIENT	.04368	.00218	.00008	.04480	.00058	.00026	-.00006	-.00053	.11962	.00189

DATCOM [illegible] ORIGINAL (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	MAC =	43.5974 INCHES
LREF =	19.2268 INCHES	XMC =	.000 INCHES
SPAN =	37.9345 INCHES	ZMC =	16.2000 INCHES
SCALE =	.0400 SCALE		

PARAMETRIC DATA

BETA =	.000	DELTAF =	-18.000
ELEVON =	.000	AILRON =	10.000
RUDDER =	.000	NACBTA =	5.000
NACAX =	.000	NACLIP =	7.000

RUN NO. 641 S MACH = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CM	CAF	CYN	CBL	CY	YCP/L	CAB
.ZZ+	-4.0+	-.1141-	.0084-	.0138-	-.1139-	.0013	-.0010-	.0149-	-.0200-	.6900	.0312
.ZZ+	-1.9-	-.0177-	.0084-	.0165-	-.0139-	.0009	-.0004-	.0150-	-.0080-	.9900	.0341
.ZZ+	-.9-	.0226-	.0084-	.0198-	.0015-	.0001	-.0001-	.0155-	-.0015-	.4300	.0365
.ZZ+	.0-	.0700-	.0086-	.0210-	.0700-	.0080-	.0004-	.0155-	-.0000-	.9400-	.0337
.ZZ+	1.0-	.1220-	.0096-	.0265-	.1220-	.0074-	.0010-	.0157-	-.0040-	.9800-	.0401-
.ZZ+	2.1-	.1750-	.0120-	.0370-	.1770-	.0022-	.0012-	.0160-	-.0060-	.6900-	.0405-
.ZZ+	4.2-	.2867-	.0207-	.0555-	.2790-	.0050-	.0018-	.0150-	-.0090-	.6100-	.0385-
.ZZ+	6.2-	.3855-	.0340-	.0806-	.3710-	.0020-	.0020-	.0140-	-.0120-	.6200-	.0447-
.ZZ+	8.2-	.4840-	.0540-	.1140-	.4700-	.0024-	.0020-	.0135-	-.0170-	.6200-	.0522-
.ZZ+	10.2-	.5720-	.0815-	.1480-	.5580-	.0030-	.0020-	.0145-	-.0190-	.6200-	.0575-
.ZZ+	12.2-	.6700-	.1140-	.1840-	.6570-	.0020-	.0015-	.0140-	-.0200-	.6220-	.0749-
.ZZ+	14.2-	.7720-	.1530-	.2220-	.7610-	.0030-	.0020-	.0140-	-.0220-	.6220-	.0881-
.ZZ+	16.2-	.8620-	.2000-	.2620-	.8540-	-.0009-	.0010-	.0120-	-.0240-	.6220-	.0984-
.ZZ+	18.2-	.9430-	.2530-	.3020-	1.0170-	.0000-	.0020-	.0110-	-.0250-	.6260-	.0944-
.ZZ+	20.2-	1.0200-	.3070-	.3440-	1.1080-	.0027-	-.0004-	.0090-	-.0220-	.6270-	.0948-
.ZZ+	22.2-	1.0970-	.3640-	.3870-	1.1880-	.0014-	-.0020-	.0040-	-.0150-	.6260-	.0914-
.ZZ+	24.2-	1.1270-	.4010-	.4040-	1.2520-	.0019-	-.0020-	.0010-	-.0100-	.6260-	.0928-
.ZZ+	26.2-	1.1520-	.4360-	.4270-	1.3040-	.0028-	-.0020-	.0010-	.0000-	.6260-	.0892-
.ZZ+	28.2-	1.1710-	.4770-	.4470-	1.3420-	.0020-	-.0010-	.0010-	.0020-	.6260-	.0928-
.ZZ+	30.2-	1.1880-	.5180-	.4660-	1.3760-	-.0008-	-.0020-	.0000-	.0050-	.6260-	.0908-
	GRADIENT	.0484-	.0179-	.0166-	.0478-	.0002-	.0001-	.0004-	-.0027-	-.0008-	.0021-

CA71C B15C507J35F1W87 E18V3R3X10 (PDU065) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2239 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9249 INCHES	ZMRP =	16.2500 INCHES		
SCALE =	.0455 SCALE				

PARAMETRIC DATA

BETA =	.000	BOFLAP =	-18.000
ELEVON =	-10.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACWL =	.000	NACLIP =	7.000

RUN NO. 65/ 0 RNVL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-4.200	-.31850	.04725	.09960	-.32240	.04374	-.00350	-.00170	-.00100	.77000	.00998
.251	-2.110	-.21900	.03940	.10360	-.22100	.03134	-.00370	-.00150	-.00100	.82750	.00976
.251	-1.090	-.16840	.03770	.10550	-.16950	.03448	-.00380	-.00150	.00000	.88250	.00998
.251	-.080	-.11910	.03800	.10800	-.11980	.03193	-.00390	-.00130	-.00100	.98400	.01016
.251	.970	-.07130	.03580	.11050	-.07000	.0356	-.00390	-.00140	.00000	1.22100	.01026
.251	2.000	-.02540	.03630	.11300	-.01860	.037	-.00390	-.00140	.00000	2.82600	.01020
.251	4.110	.07930	.03960	.11880	.08330	.03380	-.00420	-.00200	.00100	.15000	.01068
.251	6.170	.17550	.04750	.12270	.18180	.04824	-.00410	-.00240	.00200	.41800	.01135
.251	8.240	.27920	.06420	.12660	.28890	.04367	.00500	-.00290	.00400	.50400	.01274
.251	10.310	.37750	.10260	.13330	.39000	.03433	-.00540	-.00310	.00500	.53700	.01377
.251	12.390	.48330	.12890	.14000	.49370	.02218	-.00430	-.00320	.00400	.55900	.01489
.251	14.470	.58610	.16080	.14590	.60770	.00925	-.00400	-.00310	.00300	.57400	.01589
.251	16.530	.68190	.19970	.14980	.71960	-.00261	-.00360	-.00260	.00300	.58400	.01625
.251	18.620	.78800	.25790	.14770	.82910	-.00722	-.00120	-.00320	.00200	.59600	.01767
.251	20.690	.87625	.32490	.14670	.93450	-.00564	-.00110	-.00300	.00300	.60300	.02032
.251	22.760	.94850	.45750	.14570	1.00230	.00850	-.00080	-.00460	.00400	.60900	.02573
.251	24.825	1.01700	.47540	.14830	1.12270	.00444	.00110	-.00350	.00400	.61200	.03382
.251	26.880	1.05490	.53420	.15570	1.18250	-.00062	-.00030	-.00220	.00400	.61200	.04017
.251	28.910	1.07830	.59570	.15590	1.22950	-.00429	-.00110	-.00230	.01200	.61400	.04153
.251	30.920	1.09190	.64480	.15390	1.26810	-.00807	.00030	-.00300	.01600	.61600	.04666
	GRADIENT	.04794	-.00089	.00231	.04891	.00124	-.00008	-.00002	.00023	.04171	.00009

OA71C B16C5D7J35F1W87 E18V3R3X10 (RDU66) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	15.000	AILRON =	.000
RUDDER =	.000	MACBTA =	5.000
MACXL =	.000	MACLIP =	7.000

RUN NO. 66/ 0 RNVL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-3.920	.18760	.57240	-.12675	.18210	.58517	-.00630	-.00220	.00500	.96800	.01984
.251	-1.890	.28050	.58070	-.12110	.27700	.58978	-.00640	-.00230	.00500	.81500	.01985
.251	-.810	.32770	.58630	-.11990	.32640	.59099	-.00620	-.00250	.00600	.79100	.01972
.251	.220	.37440	.59200	-.11550	.37480	.59147	-.00680	-.00300	.00700	.77000	.01965
.251	1.250	.42160	.59930	-.11270	.42360	.59001	-.00690	-.00320	.00800	.75900	.02001
.251	2.280	.46720	.60670	-.10970	.47100	.58802	-.00670	-.00410	.00900	.74300	.01999
.251	4.340	.55970	.12900	-.10220	.56750	.58228	-.00620	-.00440	.01000	.72400	.01972
.251	6.400	.64650	.14670	-.09520	.65880	.57363	-.00730	-.00980	.01900	.71100	.02560
.251	8.480	.74580	.17980	-.08760	.76350	.56405	-.00590	-.00780	.01400	.70150	.02619
.251	10.570	.86460	.21730	-.08080	.88980	.55497	-.00720	-.00900	.01800	.69600	.02146
.251	12.650	.96390	.25980	-.08230	.99740	.54224	-.00860	-.01150	.02500	.68900	.02366
.251	14.730	1.06540	.30940	-.07560	1.10420	.52948	-.00850	-.01250	.02500	.68400	.02568
.251	16.800	1.14960	.36640	-.06820	1.25650	.51841	-.00970	-.01430	.03100	.68000	.02711
.251	18.860	1.22590	.44570	-.06310	1.32460	.50628	-.00930	-.01770	.03200	.67750	.02982
.251	20.920	1.27520	.54080	-.05740	1.38430	.49462	-.00620	-.01490	.02600	.67400	.03608
.251	22.980	1.28670	.65450	-.03980	1.42560	.48454	-.00660	-.01170	.02700	.67000	.04494
.251	25.000	1.28900	.68660	-.01570	1.44570	.48028	-.00490	-.00550	.01700	.66300	.05647
.251	27.020	1.29640	.69130	.00060	1.46900	.47689	-.00380	-.00620	.02100	.65900	.06253
.251	29.050	1.29980	.72280	.00970	1.48730	.47569	-.00400	-.00510	.02400	.65700	.06271
.251	31.060	1.30270	.75370	.01460	1.50480	-.02645	-.00250	-.00480	.01900	.65600	.06520
	GRADIENT	.04510	.00635	.00295	.04671	-.00037	-.00051	-.00031	.00069	-.02114	.00000

CA71C B16C507J35F1U87 E18V2R3X10 (R2U067) (25 OCT 75)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BOFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACAVL =	.000	NACLIP =	7.000

RUN NO. 67/ 0 RNVL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-4.000	-.12120	.04660	.01640	-.12420	.03785	-.00020	-.00280	-.00400	.75700	.01382
.251	-2.000	-.02620	.04480	.02110	-.02770	.04390	-.00040	-.00310	-.00200	.93200	.01358
.251	-.970	.02560	.04390	.02320	.02900	.04634	-.00060	-.00330	-.00100	.32700	.01372
.251	.060	.07600	.04710	.02560	.07610	.04732	-.00080	-.00350	.00000	.53000	.01368
.251	1.110	.12620	.05005	.02810	.12710	.04753	-.00080	-.00360	.00000	.58000	.01407
.251	2.120	.17620	.05360	.03010	.17610	.04710	-.00120	-.00390	.00100	.59000	.01416
.251	4.190	.27680	.06230	.03490	.27650	.04395	-.00150	-.00470	.00200	.61400	.01429
.251	6.270	.37550	.08060	.03990	.38250	.03899	-.00220	-.00620	.00400	.62800	.01491
.251	8.320	.47200	.10150	.04590	.48475	.03172	-.00270	-.00630	.00700	.62900	.01585
.251	10.425	.58280	.11970	.04490	.59670	.02217	-.00300	-.00680	.00700	.63300	.01651
.251	12.490	.69075	.16390	.04880	.70990	.01060	-.00380	-.00750	.01000	.63500	.01796
.251	14.590	.79410	.20410	.05420	.82205	-.00163	-.00425	-.00880	.01200	.63600	.01909
.251	16.680	.89470	.25350	.05685	.92980	-.01395	-.00410	-.00740	.01400	.63800	.02016
.251	18.740	.99580	.31390	.05680	1.03820	-.02584	-.00480	-.00800	.01700	.64000	.02199
.251	20.810	1.09680	.40740	.05700	1.14180	.00193	-.00130	-.00980	.01300	.64200	.02526
.251	22.880	1.12700	.48700	.05775	1.22775	.01586	-.00195	-.00810	.01200	.64300	.03253
.251	24.925	1.17440	.55480	.05660	1.29080	.00811	.00000	-.00825	.01100	.64100	.04371
.251	26.990	1.18710	.60530	.05840	1.33250	.00136	-.00080	-.00830	.01200	.63800	.04797
.251	28.970	1.25090	.66130	.05780	1.37100	-.00320	-.00110	-.00250	.01200	.63700	.05042
.251	31.010	1.20040	.70250	.05010	1.39080	-.01645	-.00080	-.00280	.01500	.63600	.05434
	GRADIENT	.04766	.00259	.00223	.04849	.00074	-.00016	-.00022	.00071	-.01816	.00058

CA71C B16C507J35F1U87 E18V5R3X10 (R2U068) (25 OCT 75)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

ALPHA =	.000	BOFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACAVL =	.000	NACLIP =	7.000

RUN NO. 68/ 0 RNVL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-10.000	.09410	.03610	.01330	.09420	.03801	-.00490	.00900	.21300	.80400	.01695
.251	-5.000	.08370	.04440	.02120	.08380	.04435	-.00480	.00210	.10900	.56800	.01414
.251	-.010	.07660	.04825	.02530	.07670	.04817	-.00070	-.00330	.00200	.54100	.01374
.251	5.010	.07885	.04390	.02100	.07895	.04384	.00270	-.00650	-.10000	.56400	.01557
.251	10.070	.08200	.03580	.01680	.08200	.03576	.00450	-.01180	-.25800	.58600	.01675
	GRADIENT	-.00049	-.00005	-.00002	-.00049	-.00005	.00072	-.00105	-.02576	-.00040	.00009

OA71C B16C5D7J35F1W87 E18V3R3x10 (RDU069) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

ALPHA =	10.000	BDFLAP =	-10.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
MACH/L =	.000	NACLIP =	7.000

RUN NO. 69/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	BETA	CL	CDF	CLN	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-10.000	.59590	.11640	.02940	.60720	.00662	-.00870	.01690	.22200	.64200	.02089
.201	-5.040	.58530	.12490	.03650	.59820	.01697	-.00600	.00640	.11200	.63600	.01803
.201	-.020	.58090	.12980	.04630	.59480	.02246	-.00330	-.00700	.00900	.63200	.01627
.201	5.020	.58480	.12790	.04240	.59810	.01998	-.00040	-.01640	-.09400	.63450	.01756
.201	10.070	.58440	.12020	.03690	.59660	.01247	.00220	-.02640	-.20800	.63800	.01922
	GRADIENT	-.00007	.00090	.00039	-.00001	.00030	.00056	-.00247	-.02048	-.00020	-.00007

OA71C B16C5D7 F1W87 E18V3R3x9 (RDU070) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-10.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000		

RUN NO. 70/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLN	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.070	-.11970	.02820	.00930	-.12140	.01970	.00060	-.00160	-.00200	.68700	.01352
.201	-2.030	-.02700	.02510	.00890	-.02790	.02419	.00090	-.00160	-.00200	.77400	.01401
.201	-.990	.02080	.02490	.00920	.02040	.02534	.00050	-.00160	-.00100	.49700	.01401
.201	.040	.06810	.02570	.00910	.06810	.02565	.00040	-.00160	.00000	.61100	.01400
.201	1.080	.11690	.02730	.00990	.11740	.02513	.00050	-.00170	.00000	.63100	.01394
.201	2.110	.16510	.02910	.00980	.16610	.02300	.00040	-.00150	.00000	.63600	.01426
.201	4.170	.26040	.03570	.01000	.26230	.01666	.00050	-.00160	.00000	.64600	.01435
.201	6.230	.35080	.04570	.00920	.36150	.00649	.00010	-.00190	.00100	.65000	.01466
.201	8.310	.46100	.06160	.00970	.46590	-.00573	.00010	-.00180	.00200	.65200	.01467
.201	10.390	.56720	.08420	.01000	.57310	-.01950	.00020	-.00170	.00100	.65300	.01544
.201	12.490	.68370	.11640	.00640	.69270	-.03416	.00050	-.00170	.00200	.65600	.01738
.201	14.570	.80650	.15810	-.00040	.82050	-.04984	.00120	-.00250	.00000	.66000	.02068
.201	16.650	.93990	.22430	-.01450	.96480	-.05444	.00280	-.00140	-.00200	.66500	.02371
.201	18.730	1.05490	.30000	-.02410	1.09540	-.05473	.00320	-.00120	-.00400	.66700	.02716
.201	20.830	1.16250	.38650	-.03330	1.22390	-.05220	.00230	-.00310	.00000	.66900	.03083
.201	22.900	1.24250	.46510	-.03900	1.32480	-.05686	.00080	.00130	.00200	.66800	.03460
.201	24.990	1.30150	.53760	-.01840	1.40680	-.06202	.00030	.00250	.00100	.66400	.04025
.201	26.980	1.24710	.56460	.02420	1.36750	-.06230	-.00020	.00210	.00200	.65300	.04872
.201	28.920	1.14650	.57390	.06890	1.28110	-.05213	.00010	-.00310	.00500	.64000	.05825
.201	30.960	1.14280	.62810	.07830	1.30320	-.04934	-.00200	.00050	.00700	.63800	.06364
	GRADIENT	.04622	.00094	.00011	.04666	-.00034	-.00001	.00000	.00035	-.00699	.00009

OA71C B16C507 F1\97 E18V3R3X9 (RDU071) (20 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.5974 INCHES
LREF = 19.2299 INCHES YMRP = .0000 INCHES
BREF = 37.9343 INCHES ZMRP = 16.2000 INCHES
SCALE = .0405 SCALE

PARAMETRIC DATA

BETA = .000 BDFLAP = -18.000
ELEVON = 15.000 AILRON = .000
RUDDER = .000

RUN NO. 71/ 9 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-3.930	.18210	.04090	-.13520	.17890	.05332	.00030	-.00370	.00100	.[illegible]70	.02107
.201	-1.890	.27410	.04750	-.13580	.27240	.05625	.00020	-.00410	.00200	.83[illegible]0	.02076
.201	-.620	.32000	.05180	-.13510	.31930	.05642	.00020	-.00410	.00200	.81100	.02019
.201	.190	.36550	.05730	-.13500	.36570	.05609	.00010	-.00440	.00300	.79200	.01958
.201	1.270	.41220	.06300	-.13450	.41350	.05586	.00010	-.00430	.00300	.77600	.01990
.201	2.270	.45630	.06940	-.13320	.45870	.05132	.00010	-.00420	.00300	.76300	.01936
.201	4.320	.54460	.08460	-.13170	.54380	.04338	.00040	-.00400	.00300	.74500	.01930
.201	6.380	.65090	.10540	-.13570	.65860	.03240	.00030	-.00310	.00300	.73300	.01995
.201	8.480	.77580	.13610	-.14190	.78740	.02016	-.00020	-.00280	.00500	.72500	.02075
.201	10.580	.89540	.17420	-.15120	.91220	.00675	-.00040	-.00120	.00500	.71900	.02087
.201	12.730	1.00920	.21820	-.15350	1.03250	-.00946	-.00060	-.00170	.00500	.71300	.02222
.201	14.720	1.11730	.26870	-.15610	1.14900	-.02400	-.00020	-.00320	.00400	.70800	.02472
.201	16.820	1.22990	.35770	-.16870	1.26540	-.01336	.00390	.00310	-.00600	.70700	.03060
.201	18.910	1.33140	.44900	-.17800	1.40510	-.00690	.00320	-.00150	-.00100	.70500	.03596
.201	21.010	1.43580	.53930	-.18170	1.53370	-.01143	.00270	.00010	-.00400	.70200	.04061
.201	23.050	1.48810	.61510	-.16190	1.51010	-.01667	.00160	.00060	-.00200	.69500	.04434
.201	25.070	1.45620	.65280	-.11230	1.59560	-.02595	.00140	.00220	-.00400	.68900	.05087
.201	26.980	1.27470	.62280	-.02960	1.41860	-.02277	.00090	.00650	-.01000	.66700	.06347
.201	28.000	1.22530	.65900	-.00390	1.39120	-.01766	.00000	.00160	-.00100	.66100	.07154
.201	30.970	1.22540	.71690	.00360	1.41770	-.01524	-.00170	.00160	.00200	.65900	.07293
	GRADIENT	.04395	.00551	.00046	.04492	-.00120	.00000	-.00004	.00025	-.02137	-.00023

OA71C B16C5D7J36F1W87 E18V3R3X10 (RDU072) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.000	NACLIP =	7.000

RUN NO. 72/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.120	-.13430	.04130	-.01130	-.13690	.03154	.00090	-.00220	-.00400	.63000	.01383
.201	-2.020	-.03510	.03580	-.00630	-.03630	.03457	.00100	-.00180	-.00500	.59700	.01409
.201	-1.010	.01480	.03470	-.00330	.01420	.03501	.00110	-.00150	-.00500	.74500	.01405
.201	.040	.06510	.03450	-.00070	.06510	.03451	.00100	-.00170	-.00300	.66400	.01401
.201	1.060	.11410	.03550	.00190	.11480	.03346	.00090	-.00160	-.00200	.65300	.01439
.201	2.100	.16320	.03780	.00460	.16450	.03184	.00070	-.00170	.00000	.64900	.01408
.201	4.140	.26310	.04470	.00960	.26560	.02557	.00050	-.00220	.00100	.64600	.01405
.201	6.240	.36700	.05650	.01470	.37100	.01629	.00030	-.00270	.00200	.64500	.01482
.201	8.310	.47120	.07510	.02050	.47710	.00618	.00000	-.00260	.00100	.64400	.01503
.201	10.390	.57780	.10070	.02780	.58650	-.00512	.00030	-.00230	.00100	.64300	.01566
.201	12.490	.68390	.13270	.03410	.69640	-.01837	.00070	-.00250	.00100	.64200	.01782
.201	14.580	.79040	.17140	.04020	.80810	-.03309	.00110	-.00270	.00000	.64200	.02044
.201	16.640	.89760	.21980	.04250	.92290	-.04635	.00360	-.00380	-.00400	.64300	.02292
.201	18.700	.98600	.30400	.03770	1.03150	-.02831	.00260	.00050	-.00197	.64600	.02718
.201	20.810	1.05970	.37780	.04160	1.12480	-.02338	.00020	-.00030	.00300	.64600	.02973
.201	22.820	1.10340	.44170	.05080	1.18840	-.02091	.00170	.00220	.00000	.64400	.03273
.201	24.880	1.12230	.49850	.06490	1.22790	-.01994	.00030	.00060	.00200	.64100	.03852
.201	26.920	1.12680	.54740	.08550	1.25250	-.02200	-.00030	-.00160	.00500	.63500	.04608
.201	28.930	1.15060	.60230	.09990	1.29840	-.02960	.00000	.00230	-.00400	.63200	.05163
.201	30.980	1.17620	.66270	.11400	1.34960	-.03729	.00040	.00060	-.00200	.62900	.05448
	GRADIENT	.04811	.00042	.00255	.04872	-.00071	-.00006	.00000	.00076	.00174	.00003

OA71C B16C507J34F1W87 E18V3R3X10 (RDU073) (20 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	XMRP =	43.5974 INCHES		
LREF =	19.2299 INCHES	YMRP =	.0000 INCHES		
BREF =	37.9349 INCHES	ZMRP =	16.2000 INCHES		
SCALE =	.0405 SCALE				

PARAMETRIC DATA

BETA =	.000	BDFLAP =	-18.000
ELEVON =	.000	AILRON =	.000
RUDDER =	.000	NACBTA =	5.000
NACX/L =	.000	NACLIP =	7.000

RUN NO. 73/ 0 RN/L = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.201	-4.090	-.13490	.04640	-.01110	-.13790	.03674	.00150	-.00220	-.00400	.63100	.01448
.201	-2.030	-.03920	.04120	-.00620	-.04060	.03981	.00150	-.00180	-.00400	.60500	.01429
.201	-.990	.01150	.04010	-.00380	.01030	.04036	.00140	-.00160	-.00300	.79500	.01429
.201	.040	.06020	.03940	-.00150	.06030	.03941	.00130	-.00170	-.00100	.66600	.01461
.201	1.030	.10850	.04020	.00100	.10920	.03828	.00130	-.00180	.00000	.65600	.01454
.201	2.090	.15860	.04200	.00390	.16010	.03620	.00100	-.00200	.00100	.65100	.01453
.201	4.150	.25750	.04840	.00900	.25030	.02966	.00080	-.00220	.00200	.64700	.01486
.201	6.250	.36210	.06080	.01350	.36660	.02097	.00040	-.00260	.00200	.64600	.01476
.201	8.320	.46650	.07930	.01850	.47310	.01093	.00000	-.00250	.00200	.64500	.01562
.201	10.400	.57440	.10420	.02610	.58380	-.00114	.00000	-.00250	.00300	.64300	.01669
.201	12.490	.68120	.13600	.03190	.69450	-.01451	.00060	-.00300	.00300	.64300	.01944
.201	14.560	.78600	.17450	.03680	.80460	-.02875	.00100	-.00330	.00100	.64300	.02124
.201	16.640	.89260	.22290	.04040	.91900	-.04212	.00330	-.00410	-.00300	.64400	.02358
.201	18.730	.98140	.30760	.03500	1.02830	-.02378	.00240	.00000	.00000	.64700	.02735
.201	20.790	1.05670	.37830	.04080	1.12220	-.02148	-.00080	-.00280	.00600	.64600	.03022
.201	22.830	1.10320	.44530	.04900	1.18960	-.01779	.00060	.00030	.00200	.64500	.03302
.201	24.870	1.11470	.49850	.06320	1.22100	-.01659	-.00010	-.00070	.00300	.64100	.03903
.201	26.940	1.12700	.55070	.08170	1.25420	-.01963	-.00010	-.00280	.00600	.63600	.04684
.201	28.940	1.1[illegible]720	.60610	.09720	1.29720	-.02477	-.00020	.00120	-.00100	.63300	.05103
.201	30.980	1.16850	.66530	.10970	1.34430	-.03120	.00050	.00090	-.00500	.63000	.05390
	GRADIENT	.04773	.00022	.00244	.04843	-.00087	-.00009	-.00001	.00086	.00043	.00005

OA71C B16C50737F1W87 E18V3R3X10 (FDU074) (25 OCT 73)

REFERENCE DATA

SREF = 4.4122 SQ.FT. XMRP = 43.5974 INCHES
LREF = 19.2259 INCHES YMRP = .0000 INCHES
BREF = 37.9349 INCHES ZMRP = 16.2000 INCHES
SCALE = .0455 SCALE

PARAMETRIC DATA

BETA = .000 BOFLAP = -18.000
ELEVON = .000 AILRON = .000
RUDDER = .000 MACBTA = 5.000
MACXL = .000 MACLP = .000

RUN NO. 74/ 0 RNVL = 1.44 GRADIENT INTERVAL = -6.00/ 6.00

MACH	ALPHA	CL	CDF	CLM	CN	CAF	CYN	CBL	CY	XCP/L	CAB
.251	-4.155	-.13855	.04645	-.00995	-.14155	.03643	.00125	-.00255	-.00155	.53455	.01423
.251	-2.045	-.03275	.04155	-.00495	-.04025	.04024	.00115	-.00225	.00000	.61655	.01401
.251	-.995	.01245	.04055	-.00265	.01175	.04079	.00115	-.00215	.00005	.74005	.01421
.251	.005	.04425	.04045	-.00045	.04425	.04045	.00105	-.00225	.00005	.66255	.01439
.251	1.055	.11385	.04145	.00195	.11665	.03928	.00115	-.00245	.00005	.65455	.01454
.251	2.115	.16855	.04315	.00445	.17005	.03695	.00105	-.00265	.00005	.65005	.01481
.251	4.175	.27045	.05125	.00925	.27345	.03145	.00115	-.00295	.00005	.64705	.01445
.251	6.255	.37905	.06255	.01295	.37705	.02284	.00105	-.00325	.00155	.64705	.01496
.251	8.325	.47925	.08255	.01855	.42615	.01206	.00105	-.00315	.00005	.64655	.01514
.251	10.435	.58755	.10745	.02525	.59735	-.00068	.00115	-.00335	.00005	.64405	.01609
.251	12.505	.69205	.13915	.03115	.70665	-.01411	.00105	-.00365	.00005	.64405	.01958
.251	14.575	.80375	.17775	.03815	.81975	-.02941	.00145	-.00375	-.00205	.64305	.02088
.251	16.665	.90765	.22515	.04225	.93435	-.04365	.00365	-.00425	-.00535	.64305	.02317
.251	18.725	.99405	.28085	.03815	1.04655	-.05665	.00325	.00165	-.00635	.64605	.02753
.251	20.805	1.06545	.34755	.04395	1.13005	-.06543	.00345	.00375	-.00195	.64505	.02952
.251	22.855	1.12175	.44285	.05275	1.20965	-.06749	.00385	.00255	-.00155	.64495	.03152
.251	24.895	1.14245	.51025	.06475	1.24775	-.06542	.00365	.00345	-.00535	.64155	.03557
.251	26.915	1.14135	.55035	.06255	1.26685	-.06631	.00375	.00395	-.00505	.63655	.04367
.251	28.925	1.15365	.60575	.06745	1.27275	-.06782	.00135	-.00335	-.00405	.63355	.05035
	GRADIENT	.04959	.00053	.00229	.05032	-.00065	-.00001	-.00011	.00009	.00081	.00057

DATA: SUBSONIC DIFFUSER EXPERIMENT (POINT) (25 OCT 73)

REFERENCE DATA

SREF =	4.4122 SQ.FT.	WREF =	42.5974 INCHES
LREF =	19.2269 INCHES	YREF =	.0000 INCHES
BREF =	37.3249 INCHES	ZREF =	19.2300 INCHES
SCALE =	.1401 SCALE		

PARAMETRIC DATA

BETA =	.000	DELAP =	-12.000
ELEVON =	.000	AILRON =	.000
RUDDR =	.000	MACHA =	5.000
MACH =	.320	MACHP =	.000

RUN NO. 751 0 PAN = 1.44 GRADIENT INTERVAL = -8.00/ 8.00

MACH	ALPHA	CL	CD	CLM	CN	CAF	CPM	CBL	CY	XCP/L	CLB
ZZA	-4.39	-.3665	.1457	.0586	-.1225	.0385	.0140	-.0150	-.0400	.6220	.0198
ZZA	-1.96	-.2148	.1431	-.0146	-.0612	.1482	.0086	-.0228	-.0220	.5200	.0152
ZZA	-.96	.1458	.1456	-.0112	.1455	.1486	.0076	-.0222	-.0120	.5885	.0183
ZZA	.01	.3088	.1472	-.0146	.3226	.1472	.0140	-.0220	.0000	.6655	.0164
ZZA	1.98	.1450	.1505	-.0265	.1498	.1479	.0082	-.0295	.0120	.6665	.0194
ZZA	2.11	.1918	.1482	-.0210	.1988	.1471	.0085	-.0455	.0120	.6850	.0122
ZZA	4.26	.2695	.1675	-.0436	.2640	.1481	.0120	-.0285	-.0120	.6750	.0199
ZZA	5.25	.3192	.1831	-.0405	.3195	.1482	.0130	-.0285	-.0120	.6720	.0194
ZZA	8.25	.4227	.2202	-.0276	.4226	.1116	.0120	-.0215	-.0120	.6650	.0184
ZZA	10.42	.5038	.2483	-.0227	.5115	.1121	.0140	-.0275	.0000	.6810	.0173
ZZA	12.48	.5785	.2725	.0220	.5916	.0966	.0080	-.0145	.0220	.6885	.0181
ZZA	14.57	.7685	.3448	.0830	.6286	-.0195	.0170	-.0220	-.0400	.6960	.0189
ZZA	16.66	.8940	.3947	.0960	.7227	-.0276	.0120	-.0455	-.0120	.6970	.0215
ZZA	18.75	.9772	.4358	.0260	1.0223	-.0338	.0140	.0040	-.0220	.6990	.0203
ZZA	20.78	1.0651	.4686	.0485	1.1135	-.0323	.0086	-.0180	.0220	.6980	.0214
ZZA	22.87	1.1435	.4975	.0240	1.1735	-.0344	.0080	-.0220	.0220	.6960	.0214
ZZA	24.86	1.2085	.5245	.0195	1.2365	-.0342	.0086	-.0220	.0120	.6935	.0205
ZZA	26.85	1.2520	.5485	.0420	1.2775	-.0345	.0120	-.0060	.0000	.6870	.0202
ZZA	28.85	1.2985	.5645	.0495	1.3225	-.0348	.0080	-.0180	.0120	.6885	.0202
ZZA	30.95	1.3457	.5835	.0185	1.3720	-.0269	.0120	-.0270	.0220	.6885	.0202
	GRADIENT	.0474	.0256	-.0149	.0528	.0086	-.0008	-.0018	.0048	.0068	-.0002

[illegible]

[illegible]

[illegible]